42

08/080,472
6/28/96

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SYSTEM:OS  - DIALOG OneSearch
  File  55:BIOSIS PREVIEWS(R)  1985-1996/Jun W3
        (c) 1996 BIOSIS
  File  50:CAB Abstracts  1972-1996/May
        (c) 1996 CAB International
  File  72:EMBASE  1985-1996/Iss 24
        (c) 1996 Elsevier Science B.V.
  File  76:Life Sciences Collection  1982-1996/May
        (c) 1996 Cambridge Sci Abs
  File 155:MEDLINE(R)  1966-1996/AUG W4
        (c) format only 1996 Knight-Ridder Info
*File 155: Type HELP NEWS 155 for 1996 reload information
***  MEDLINE updates delayed. See HELP DELAY 155.
  File 342:Derwent Patents Citation Indx  1978-96/96C18A
        (c) 1996 Derwent Info Ltd
*File 342: MAPs of Cited/Citing Patent Numbers or Derwent Accession
Numbers are now working correctly.
  File 348:EUROPEAN PATENTS  1978-1996/JUN W3
        (c) 1996 European Patent Office
*File 348:  *** EPO is now CURRENT! ***
Fulltext is forthcoming.  See HELP NEWS 348 for more information.
  File 399:CA SEARCH(R)  1967-1996/UD=12501
        (c) 1996 American Chemical Society
*File 399: Use is subject to the terms of your user/customer agreement.
For format prices, including formats 6 & 8, see HELP RATES 399.

      Set  Items  Description
      ---  -----  -----------
?E ALKANE


Ref    Items   RT  Index-term
E1        13       ALKANDIYLREST
E2         1       ALKANDSULFONATE
E3     41120   18 *ALKANE
E4        81       ALKANE --DRUG ANALYSIS --AN
E5         8       ALKANE --DRUG COMBINATION --CB
E6         6       ALKANE --DRUG COMPARISON --CM
E7        41       ALKANE --DRUG DEVELOPMENT --DV
E8         1       ALKANE --DRUG DOSE --DO
E9         2       ALKANE --DRUG INTERACTION --IT
E10       72       ALKANE --DRUG TOXICITY --TO
E11       15       ALKANE --ENDOGENOUS COMPOUND --EC
E12        5       ALKANE --PHARMACEUTICS --PR

          Enter P or PAGE for more
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?S E3

      S1    41120  "ALKANE"
?P


Ref    Items    RT  Index-term
E13        9        ALKANE --PHARMACOLOGY --PD
E14        0     1  ALKANE ALCOHOL
E15        1        ALKANE BETAINE SULFONATE
E16        1        ALKANE C 14
E17      190    49  ALKANE DERIVATIVE
E18       86        ALKANE DERIVATIVE --DRUG ANALYSIS --AN
E19        1        ALKANE DERIVATIVE --DRUG COMBINATION --CB
E20        9        ALKANE DERIVATIVE --DRUG COMPARISON --CM
E21       79        ALKANE DERIVATIVE --DRUG DEVELOPMENT --DV
E22        5        ALKANE DERIVATIVE --DRUG DOSE --DO
E23        1        ALKANE DERIVATIVE --DRUG INTERACTION --IT
E24       23        ALKANE DERIVATIVE --DRUG TOXICITY --TO

          Enter P or PAGE for more
?P


Ref    Items    RT  Index-term
E25        3        ALKANE DERIVATIVE --PHARMACEUTICS --PR
E26        4        ALKANE DERIVATIVE --PHARMACOKINETICS --PK
E27       14        ALKANE DERIVATIVE --PHARMACOLOGY --PD
E28        2        ALKANE DIOL DERIVATIVE
E29        1        ALKANE DISULFIDE
E30        1        ALKANE EARTHS
E31        1        ALKANE EXHALATION
E32        0     1  ALKANE HALIDE
E33        0     1  ALKANE HALOGEN DERIVATIVE
E34       10        ALKANE HYDROXYLASE
E35        5        ALKANE MONOSULFONATE
E36        0     1  ALKANE SULFONATE

          Enter P or PAGE for more
?E CORDYCEPIN


Ref    Items    RT  Index-term
E1         1        CORDYCEP
E2         1        CORDYCEPIC
E3      1403    17 *CORDYCEPIN
E4        13        CORDYCEPIN --DRUG ANALYSIS --AN
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E5          9        CORDYCEPIN --DRUG COMBINATION --CB
E6         16        CORDYCEPIN --DRUG COMPARISON --CM
E7          1        CORDYCEPIN --DRUG CONCENTRATION --CR
E8          7        CORDYCEPIN --DRUG DEVELOPMENT --DV
E9          2        CORDYCEPIN --DRUG DOSE --DO
E10         7        CORDYCEPIN --DRUG INTERACTION --IT
E11         1        CORDYCEPIN --DRUG MIXTURE
E12         1        CORDYCEPIN --DRUG POTENTIATION

          Enter P or PAGE for more
?S E3

      S2    1403   "CORDYCEPIN"
?S S1 OR S2

           41120   S1
            1403   S2
      S3    42523   S1 OR S2
?S PRIMER? OR OLIGONUCLEOTIDE? OR PROMOTER? OR PROMOTOR?

           88829   PRIMER?
           88011   OLIGONUCLEOTIDE?
          210183   PROMOTER?
            6873   PROMOTOR?
      S4  362260   PRIMER? OR OLIGONUCLEOTIDE? OR PROMOTER? OR PROMOTOR?
?S S3 OR S4

           42523   S3
          362260   S4
      S5  404450   S3 OR S4
?S S3 AND S4

           42523   S3
          362260   S4
      S6     333   S3 AND S4
?S S3 (2N) S4

           42523   S3
          362260   S4
      S7      50   S3 (2N) S4
?RD

>>>Duplicate detection is not supported for File 342.
>>>Duplicate detection is not supported for File 348.

>>>Records from unsupported files will be retained in the RD set.
...examined 50 records   (50)
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...completed examining records
S8 47 RD (unique items)
?T S8/3,AB/1-47

>>>No matching display code(s) found in file(s): 342, 399

8/3,AB/1 (Item 1 from file: 55)
DIALOG(R)File 55:BIOSIS PREVIEWS(R)

9055722 BIOSIS Number: 93040722
CHARACTERIZATION OF A SECOND ALKANE-INDUCIBLE CYTOCHROME P450-ENCODING GENE CYP52A2 FROM CANDIDA-TROPICALIS
SEGHEZZI W; SANGLARD D; FIECHTER A
INST. BIOTECHNOL., SWISS FED. INST. TECHNOL., ETH-HONGGERBERG, CH-8093 ZURICH, SWITZERLAND.
GENE (AMST) 106 (1). 1991. 51-60. CODEN: GENED
Full Journal Title: GENE (Amsterdam)
Language: ENGLISH
A second alkane-inducible cytochrome P450-encoding gene (CYP52A2) from the yeast Candida tropicalis was sequenced and characterized. CYP52A2 is located 1 kb upstream from CYP52A1, the previously characterized P450 gene [Sanglard and Loper, Gene 76 (1989) 121-136] and shows the same orientation. Like CYP52A1, CYP52A2 is induced by growth on alkane. Both promoter regions share repeats of the sequence CATGTGAA that could be of importance for the induction of the two genes. At the amino acid level, alk2 shows an overall identity of 68.2% and an overall similarity of 81.6% to alk1. Regions of high homology between the two proteins are found in the distal and proximal heme binding sites which contain the highly conserved cysteine residue as the fifth ligand to the heme iron. However, marked differences between the two proteins exist at their N-terminal end, which includes the transmembrane domain, and at the putative substrate-binding domain. Upon expression of CYP52A2 in Saccharomyces cerevisiae, alk2 was shown to hydroxylate hexadecane, but had no hydroxylation activity towards lauric acid, whereas alk1 showed both activities. Comparative imunoblots demonstrate that neither alk1 nor alk2 expressed in S. cerevisiae corresponds to the main cytochrome P450 present in C. tropicalis when grown on alkane.

8/3,AB/2 (Item 1 from file: 342)
DIALOG(R)File 342:Derwent Patents Citation Indx

02179329 WPI Acc No: 80-18308C/10
3,3-Bis-dimethylamino-N,N,N',N'-tetramethylacrylamidinium salts - acting as promoters for catalytic alkane-polyol prepn.

Patent Assignee: (UNIC) UNION CARBIDE CORP
Author (Inventor): KAPLAN L
Patent (basic)
Patent No Kind Date Examiner Field of Search
US 4190598 A 800226 (BASIC)
Derwent Week (Basic): 8010
Derwent Class: E19
Int Pat Class: C07C-027/06
Number of Patents: 001
Number of Countries: 001
Number of Cited Patents: 001
Number of Cited Literature References: 000
Number of Citing Patents: 000

8/3,AB/3 (Item 2 from file: 342)
DIALOG(R)File 342:Derwent Patents Citation Indx

00897787 WPI Acc No: 92-058650/08
New calcitonin-contg. emulsion for nasal safe admin. - with aza cycloalkane deriv. absorption promoter and glycyrrhizic acid or salt, for hypercalcaemia and osteoporosis treatment
Patent Assignee: (TOXN) TOYO JOZO KK; (HISM) HISAMISTU PHARM CO INC
Author (Inventor): YAMAMOTO N; SUGIMOTO M; SAKAKIBARA H; SAITA M; SHIMOZONO Y; MANAKO T
Patent (basic)
Patent No Kind Date Examiner Field of Search
EP 471618 A 920219 (BASIC)
Derwent Week (Basic): 9208
Priority Data: JP 90215044 (900816)
Applications: JP 90215044 (900816); US 734637 (910723); IE 912614 (910724); CA 2047903 (910725); NZ 239166 (910729); DE 600436 (910812); EP 91402231 (910812); PT 98692 (910816)
Designated States (Regional): AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LI; LU; NL; SE
Derwent Class: B03; B07
Int Pat Class: A61K-009/06; A61K-009/10; A61K-009/107; A61K-031/395; A61K-031/40; A61K-031/445; A61K-031/55; A61K-033/24; A61K-037/30; A61K-038/23; A61K-047/22; A61K-047/26
Number of Patents: 011
Number of Countries: 022
Number of Cited Patents: 002
Number of Cited Literature References: 000
Number of Citing Patents: 000

8/3,AB/4 (Item 3 from file: 342)
DIALOG(R)File 342:Derwent Patents Citation Indx

00150494 WPI Acc No: 84-106996/17
Oxidn. of phenol to benzoquinone - with bivalent copper catalyst, using vicinal dialkoxy alkane or cycloalkane promoter
Patent Assignee: (SUNO) SUN TECH INC
Author (Inventor): HSU C Y; LYONS J E
Patent (basic)

Patent No	Kind	Date	Examiner Field of Search (BASIC)
US 4442036	A	840410	

Derwent Week (Basic): 8417
Applications: US 470694 (830228)
Derwent Class: E14
Int Pat Class: C07C-049/64
Number of Patents: 001
Number of Countries: 001
Number of Cited Patents: 006
Number of Cited Literature References: 000
Number of Citing Patents: 003

8/3,AB/5 (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00416755
Tree resistant compositions.
PATENT ASSIGNEE:
UNION CARBIDE CHEMICALS AND PLASTICS COMPANY, INC., (1128641), 39 Old Ridgebury Road, Danbury Connecticut 06817-0001, (US), (applicant designated states: AT;BE;CH;DE;ES;FR;GB;IT;LI;NL;SE)
AUTHOR (Inventor):
Turbett, Robert John, 1738 Long Hill Road, Millington, New Jersey 07946, (US)
Barnabeo, Austin Emidio, 533 Spring Valley Drive, Bridgewater, New Jersey 08807, (US)
Marsden, Eric Paul, 104 Mine Street, Flemington, New Jersey 08822, (US)
Mendelsohn, Alfred, 1467 East 13th Street, New York, New York 11230, (US)
Umpleby, Jeffrey David, 58 Le Prieure, F-01210 Ferney-Voltaire, (FR)
LEGAL REPRESENTATIVE:
Barz, Peter, Dr. et al (1468), Patentanwalt Kaiserplatz 2, D-80803 Munchen, (DE)
PATENT (CC, No, Kind, Date): EP 410431 A1 910130 (Basic)
EP 410431 B1 950517
APPLICATION (CC, No, Date): EP 90114288 900725;

PRIORITY DATA (CC, No, Date): US 385702 890726
LANGUAGE (Publication,Procedural,Application): English; English; English
DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; IT; LI; NL; SE
INTL PAT CLASS: H01B-003/44; C08L-023/08; C08F-210/16
WORD COUNT: 148

ABSTRACT: EP 410431 A1
A water tree resistant composition comprising:
(a) a copolymer of at least the two comonomers, ethylene and 4-methyl-1-pentene, said copolymer having a density no greater than about 0.920 gram per cubic centimeter; or
(b) a copolymer of at least the two comonomers, ethylene and 1-octene, said copolymer having a density no greater than about 0.920 gram per cubic centimeter; or
(c) the copolymer of (a) or (b) grafted with a hydrolyzable vinyl silane, the copolymers of (a) and (b) being produced by contacting the relevant comonomers, under polymerization conditions, with (i) a catalyst system containing a catalyst precursor comprising magnesium, titanium, a halogen, and an electron donor, and a hydrocarbyl aluminum cocatalyst or (ii) a catalyst system containing a catalyst precursor comprising vanadium an electron donor, and a hydrocarbyl aluminum halide; a hydrocarbyl aluminum cocatalyst; and a halogen substituted lower alkane promoter.

8/3,AB/6 (Item 2 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00342478
Tree resistant compositions.
PATENT ASSIGNEE:
UNION CARBIDE CORPORATION, (208660), 39 Old Ridgebury Road, Danbury Connecticut 06817, (US), (applicant designated states: AT;BE;CH;DE;ES;FR;GB;GR;IT;LI;LU;NL;SE)
AUTHOR (Inventor):
Turbett, Robert John, 1738 Long Hill Road, Millington New Jersey 07946, (US)
Barnabeo, Austin Emidio, 533 Spring Valley Drive, Bridgewater New Jersey 08807, (US)
Marsden, Eric Paul, 104 Mine Street, Flemington New Jersey 08822, (US)
Umpleby, Jeffrey David, 144 Library Place, Princeton New Jersey 08540, (US)
Mendelsohn, Alfred, 1467 East 13th St., Brooklyn New York 11230, (US)
LEGAL REPRESENTATIVE:
Barz, Peter, Dr. et al (1461), Patentanwalte Dipl.-Ing. G. Dannenberg Dr. P. Weinhold, Dr. D. Gudel Dipl.-Ing. S. Schubert, Dr. P. Barz Siegfriedstrasse 8, D-8000 Munchen 40, (DE)

PATENT (CC, No, Kind, Date): EP 341644 A1 891115 (Basic)
APPLICATION (CC, No, Date): EP 89108272 890509;
PRIORITY DATA (CC, No, Date): US 192676 880510
LANGUAGE (Publication,Procedural,Application): English; English; English
DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; LU; NL; SE
INTL PAT CLASS: H01B-003/44; C08L-023/08; C08F-210/16
WORD COUNT: 148

ABSTRACT: EP 341644 A1
A water tree resistant composition comprising:
(a) a copolymer of at least the two comonomers, ethylene and 1-butene, said copolymer having a density no greater than about 0.905 gram per cubic centimeter; or
(b) a copolymer of at least the two comonomers, ethylene and 1-hexene, said copolymer having a density no greater than about 0.920 gram per cubic centimeter; or
(c) the copolymer of (a) or (b) grafted with a hydrolyzable vinyl silane, the copolymers of (a) and (b) being produced by contacting the relevant comonomers, under polymerization conditions, with (i) a catalyst system containing a catalyst precursor comprising magnesium, titanium, a halogen, and an electron donor, and a hydrocarbyl aluminum cocatalyst or (ii) a catalyst system containing a catalyst precursor comprising vanadium, an electron donor, and a hydrocarbyl aluminum halide; a hydrocarbyl aluminum cocatalyst; and a halogen substituted lower alkane promoter.

8/3,AB/7 (Item 1 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

124086348 CA: 124(7)86348h PATENT
Preparation of .omega.-halo-1-alkenes from .alpha.,.omega.-dihaloalkanes
INVENTOR(AUTHOR): Manabe, Hiroya; Ueno, Toshio; Muranishi, Shuichi; Masuda, Hideki; Kameda, Wataru
LOCATION: Japan,
ASSIGNEE: Ogawa Koryo Kk
PATENT: Japan Kokai Tokkyo Koho ; JP 95206731 A2 ; JP 07206731 DATE: 950808
APPLICATION: JP 944314 (940120)
PAGES: 3 pp. CODEN: JKXXAF LANGUAGE: Japanese CLASS: C07C-021/04A; C07C-017/269B; C07C-021/14B; C07B-061/00

8/3,AB/8 (Item 2 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

122105301 CA: 122(9)105301q PATENT
Oxidation of cycloalkanes
INVENTOR(AUTHOR): Murahashi, Shunichi; Naota, Takeshi
LOCATION: Japan, .
ASSIGNEE: Sumitomo Chemical Co
PATENT: Japan Kokai Tokkyo Koho ; JP 94263664 A2 ; JP 06263664 DATE: 940920
APPLICATION: JP 9352028 (930312)
PAGES: 4 pp. CODEN: JKXXAF LANGUAGE: Japanese CLASS: C07C-027/00A; B01J-031/30B; C07C-027/12B; C07C-029/48B; C07C-035/08B; C07C-045/33B; C07C-049/403B; C07B-061/00

8/3,AB/9 (Item 3 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

121159168 CA: 121(14)159168z PATENT
Polyester films with antistatic primer coatings for adhesion to magnetic coatings
INVENTOR(AUTHOR): Okada, Shinichiro; Takahashi, Teruo; Fukuda, Masayuki
LOCATION: Japan,
ASSIGNEE: Teijin Ltd
PATENT: Japan Kokai Tokkyo Koho ; JP 94145394 A2 ; JP 06145394 DATE: 940524
APPLICATION: JP 92301141 (921111)
PAGES: 6 pp. CODEN: JKXXAF LANGUAGE: Japanese CLASS: C08J-007/04A; B29C-055/12B; B32B-027/36B; C08K-005/42B; C08L-067/02B; C09D-167/02B; B29K-067/00Z; B29L-007/00Z; B29L-009/00Z

8/3,AB/10 (Item 4 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

120273182 CA: 120(22)273182d PATENT
Multilayer coating composition having improved intercoat adhesion of clearcoat to base layer in automotive finish
INVENTOR(AUTHOR): Shiraga, Ryuichi; Takeuchi, Kunihiko; Umeda, Shinichirou; Yoshioka, Manabu; Miwa, Hiroshi
LOCATION: Japan,
ASSIGNEE: Nippon Paint Co., Ltd.
PATENT: European Pat. Appl. ; EP 571977 A2 DATE: 931201
APPLICATION: EP 93108500 (930526) *JP 92133380 (920526)
PAGES: 13 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C09D-007/12A; B05D-007/26B DESIGNATED COUNTRIES: DE; FR; GB

8/3,AB/11 (Item 5 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

119263719 CA: 119(25)263719z JOURNAL
Construction of an expression and site-directed mutagenesis system of haloalkane dehalogenase in Escherichia coli
AUTHOR(S): Schanstra, Joost P.; Rink, Rick; Pries, Frens; Janssen, Dick B.
LOCATION: Dep. Biochem., Univ. Groningen, 9747 AG, Groningen, Neth.
JOURNAL: Protein Expression Purif. DATE: 1993 VOLUME: 4 NUMBER: 5
PAGES: 479-89 CODEN: PEXPEJ ISSN: 1046-5928 LANGUAGE: English

8/3,AB/12 (Item 6 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

119011744 CA: 119(2)11744x JOURNAL
The oxidative coupling of methane and the oxidative dehydrogenation of ethane over a niobium-promoted lithium-doped magnesium oxide catalyst
AUTHOR(S): Swaan, H. M.; Li, Y.; Seshan, K.; Van Ommen, J. G.; Ross, J. R. H.
LOCATION: Fac. Chem. Technol., Univ. Twente, 7500 AE, Enschede, Neth.
JOURNAL: Catal. Today DATE: 1993 VOLUME: 16 NUMBER: 3-4 PAGES: 537-46
CODEN: CATTEA ISSN: 0920-5861 LANGUAGE: English

8/3,AB/13 (Item 7 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

119008501 CA: 119(1)8501k PATENT
Process and catalysts for the coversion of alkylaryl compounds into alcohols and ketones
INVENTOR(AUTHOR): Murahashi, Shunichi; Oda, Yoshiaki
LOCATION: Japan,
ASSIGNEE: Sumitomo Chemical Co., Ltd.
PATENT: European Pat. Appl. ; EP 531715 A1 DATE: 930317
APPLICATION: EP 92113462 (920807) *JP 91199221 (910808) *JP 91275381 (911023) *JP 91277689 (911024) *JP 9252439 (920311)
PAGES: 37 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C07C-045/33A; C07C-045/36B; C07C-029/50B DESIGNATED COUNTRIES: BE; DE; FR; GB; IT; NL

8/3,AB/14 (Item 8 from file: 399)

DIALOG(R)File 399:CA SEARCH(R)

117153975 CA: 117(16)153975f JOURNAL
Burning-rate enhancement of organic diazide propellants. Dihalide addition and pressure elevation
AUTHOR(S): Lee, A.; Jiang, Y. J.; Zhu, D. L.; Law, C. K.
LOCATION: Princeton Univ., Princeton, NJ, 08544, USA
JOURNAL: AIAA J. DATE: 1992 VOLUME: 30 NUMBER: 5 PAGES: 1298-303
CODEN: AIAJAH ISSN: 0001-1452 LANGUAGE: English

8/3,AB/15 (Item 9 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

117011296 CA: 117(2)11296m PATENT
Halogen-assisted conversion of lower alkanes
INVENTOR(AUTHOR): Nubel, Philip O.; Satek, Larry C.; Spangler, Michael J.; Lutman, Charles A.; Michaels, Glenn O.
LOCATION: USA
ASSIGNEE: Amoco Corp.
PATENT: United States ; US 5087786 A DATE: 920211
APPLICATION: US 514173 (900425)
PAGES: 16 pp. CODEN: USXXAM LANGUAGE: English CLASS: 585500000; C01C-002/00

8/3,AB/16 (Item 10 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

115094431 CA: 115(10)94431j JOURNAL
Investigation of plasma-polymerized films as primers for parylene-C coatings on neural prosthesis materials
AUTHOR(S): Yamagishi, Frederick G.
LOCATION: Hughes Res. Lab., Malibu, CA, 90265, USA
JOURNAL: Thin Solid Films DATE: 1991 VOLUME: 202 NUMBER: 1 PAGES: 39-50 CODEN: THSFAP ISSN: 0040-6090 LANGUAGE: English

8/3,AB/17 (Item 11 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

114094635 CA: 114(11)94635h JOURNAL
Cordycepin analogs of 2',5'-oligoadenylate inhibit human immunodeficiency

virus infection via inhibition of reverse transcriptase
AUTHOR(S): Mueller, Werner E. G.; Weiler, Barbara E.; Charubala, Ramamurthy; Pfleiderer, Wolfgang; Leserman, Lee; Sobol, Robert W.; Suhadolnik, Robert J.; Schroeder, Heinz C.
LOCATION: Inst. Physiol. Chem., Johannes Gudenberg-Univ., 6500, Mainz, Fed. Rep. Ger.
JOURNAL: Biochemistry DATE: 1991 VOLUME: 30 NUMBER: 8 PAGES: 2027-33
CODEN: BICHAW ISSN: 0006-2960 LANGUAGE: English

8/3,AB/18 (Item 12 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

112011949 CA: 112(2)11949y PATENT
Single-phase dental primers containing film-forming agents and mineral or carboxylate salts
INVENTOR(AUTHOR): Aasen, Steven M.; Oxman, Joel D.
LOCATION: USA
ASSIGNEE: Minnesota Mining and Mfg. Co.
PATENT: European Pat. Appl. ; EP 305083 A2 DATE: 890301
APPLICATION: EP 88307425 (880811) *US 91051 (870828)
PAGES: 10 pp. CODEN: EPXXDW LANGUAGE: English CLASS: A61K-006/00A
DESIGNATED COUNTRIES: CH; DE; FR; GB; IT; LI; NL; SE

8/3,AB/19 (Item 13 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

111236159 CA: 111(26)236159v PATENT
Modification of the sensitivity of a nitroalkane-based explosives
INVENTOR(AUTHOR): Roine, Rene; Sinturel, Alain
LOCATION: Fr.
ASSIGNEE: Societe d'Artifices Titan
PATENT: France Demande ; FR 2621581 A1 DATE: 890414
APPLICATION: FR 8714044 (871012)
PAGES: 10 pp. CODEN: FRXXBL LANGUAGE: French CLASS: C06B-023/00A; C06B-025/00B; C06B-045/00B

8/3,AB/20 (Item 14 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

111147566 CA: 111(17)147566h JOURNAL
The Pseudomonas oleovorans alkane hydroxylase gene. Sequence and

expression
AUTHOR(S): Kok, Menno; Oldenhuis, Roelof; Van der Linden, Mark P. G.; Raatjes, Philip; Kingma, Jaap; Van Lelyveld, Philip H.; Witholt, Bernard
LOCATION: Groningen Biotechnol. Cent., Univ. Groningen, 9747AG, Groningen, Neth.
JOURNAL: J. Biol. Chem. DATE: 1989 VOLUME: 264 NUMBER: 10 PAGES: 5435-41 CODEN: JBCHA3 ISSN: 0021-9258 LANGUAGE: English

8/3,AB/21 (Item 15 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

108074883 CA: 108(9)74883k JOURNAL
A mild and convenient method for the reduction of organic halides by using a samarium diiodide-THF solution in the presence of hexamethylphosphoric triamide (HMPA)
AUTHOR(S): Inanaga, Junji; Ishikawa, Mitsuhiro; Yamaguchi, Masaru
LOCATION: Dep. Chem., Kyushu Univ., Fukuoka, Japan, 812
JOURNAL: Chem. Lett. DATE: 1987 NUMBER: 7 PAGES: 1485-6 CODEN: CMLTAG
ISSN: 0366-7022 LANGUAGE: English

8/3,AB/22 (Item 16 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

101174443 CA: 101(20)174443r PATENT
Hydrocarbon cracking process
INVENTOR(AUTHOR): Kolts, John Henry
LOCATION: USA
ASSIGNEE: Phillips Petroleum Co.
PATENT: European Pat. Appl. ; EP 113657 A2 DATE: 840718
APPLICATION: EP 84100029 (840103) *US 456156 (830106)
PAGES: 18 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C07C-004/06
DESIGNATED COUNTRIES: BE; DE; GB

8/3,AB/23 (Item 17 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

100191301 CA: 100(23)191301q JOURNAL
Effect of various promoters on the yield and isomeric composition of C6+ alkylates produced by alkylation of isopentane by ethylene in the presence of aluminum chloride complex with diethyl ether
AUTHOR(S): Glozshtein, A. Ya.; Sidorov, V. A.

LOCATION: USSR
JOURNAL: Zh. Prikl. Khim. (Leningrad) DATE: 1984 VOLUME: 57 NUMBER: 1
PAGES: 201-2 CODEN: ZPKHAB ISSN: 0044-4618 LANGUAGE: Russian

8/3,AB/24 (Item 18 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

96068241 CA: 96(9)68241s JOURNAL
Effect of halogen-containing compounds on the alkylation of isobutane and n-butane by butylenes
AUTHOR(S): Mortikov, E. S.; Chkheidze, G. S.; Gritskov, A. M.
LOCATION: Inst. Org. Khim. im. Zelinskogo, Moscow, USSR
JOURNAL: Neftekhimiya DATE: 1981 VOLUME: 21 NUMBER: 5 PAGES: 662-8
CODEN: NEFTAH ISSN: 0028-2421 LANGUAGE: Russian

8/3,AB/25 (Item 19 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

95216150 CA: 95(25)216150h JOURNAL
Comparison of the promoting activity of pristane and n-alkanes in skin carcinogenesis with their physical effects on micellar models of biological membranes
AUTHOR(S): Horton, A. Wesley; Bolewicz, Linda C.; Barstad, Arthur W.; Butts, Charles K.
LOCATION: Sch. Med., Univ. Oregon, Portland, OR, 97201, USA
JOURNAL: Biochim. Biophys. Acta DATE: 1981 VOLUME: 648 NUMBER: 1
PAGES: 107-12 CODEN: BBACAQ ISSN: 0006-3002 LANGUAGE: English

8/3,AB/26 (Item 20 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

94055968 CA: 94(8)55968t PATENT
Dry transfer material
INVENTOR(AUTHOR): Haazebroek, Arnold
LOCATION: Neth.
ASSIGNEE: Grafische Onderneming Mago B. V.
PATENT: United States US 4228211 DATE: 801014
APPLICATION: United States US 945708 DATE: 780922
PAGES: 4 pp. CODEN: USXXAM LANGUAGE: English CLASS: 428203000; B32B-003/18; B41M-003/12; B44C-001/16;

8/3,AB/27 (Item 21 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

93240600 CA: 93(26)240600j PATENT
Filler-containing polymeric molding compositions
INVENTOR(AUTHOR): Lueders, Walter; Burg, Karlheinz; Herwig, Walter; Van Spankeren, Ulrich
LOCATION: Fed. Rep. Ger.
ASSIGNEE: Hoechst A.-G.
PATENT: Germany Offen. DE 2910586 DATE: 800918
APPLICATION: Germany DE 2910586 DATE: 790317
PAGES: 24 pp. CODEN: GWXXBX LANGUAGE: German CLASS: C08L-023/00; C08K-003/26; C08K-005/42; C08K-005/53;

8/3,AB/28 (Item 22 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

93189014 CA: 93(20)189014s PATENT
Hydrocarbon isomerization utilizing a hydrocarbon promoter with tantalum pentafluoride and hydrogen halide catalyst
INVENTOR(AUTHOR): McCaulay, David A.; Nevitt, Thomas D.
LOCATION: USA
ASSIGNEE: Standard Oil Co. (Indiana)
PATENT: United States US 4214116 DATE: 800722
APPLICATION: United States US 47060 DATE: 790611
PAGES: 6 pp. CODEN: USXXAM LANGUAGE: English CLASS: 585747000; C07C-005/28;

8/3,AB/29 (Item 23 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

93166993 CA: 93(17)166993w JOURNAL
Cesium fluoride-promoted reaction of aldehydes with S-(2-benzimidazolyl)alkanethioates. A new method for the preparation of enol esters
AUTHOR(S): Mukaiyama, Teruaki; Murakami, Masahiro; Yamaguchi, Masahiko
LOCATION: Fac. Sci., Univ. Tokyo, Tokyo, Japan, 113
JOURNAL: Chem. Lett. DATE: 1980 NUMBER: 5 PAGES: 529-32 CODEN: CMLTAG
ISSN: 0366-7022 LANGUAGE: English

8/3,AB/30 (Item 24 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

93113905 CA: 93(11)113905n JOURNAL
Study of the oxidation of a mixture of hydrocarbons with bottom products
AUTHOR(S): Dayan, V. M.; Levush, S. S.; Bryukhovetskii, V. A.; Shevchuk, V. U.
LOCATION: Nauchno-Proizvod. Ob'edin. "Nairit", Yerevan, USSR
JOURNAL: Arm. Khim. Zh. DATE: 1980 VOLUME: 33 NUMBER: 1 PAGES: 18-22
CODEN: AYKZAN ISSN: 0515-9628 LANGUAGE: Russian

8/3,AB/31 (Item 25 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

92044349 CA: 92(6)44349z JOURNAL
Sulfoxidation of n-paraffins in the presence of acetic anhydride and chloroform
AUTHOR(S): Kowalski, Antoni; Perkowski, Jan
LOCATION: Inst. Tech. Radiacyjnej, Politech. Lodzka, Lodz, Pol.
JOURNAL: Przem. Chem. DATE: 1979 VOLUME: 58 NUMBER: 6 PAGES: 300-2
CODEN: PRCHAB ISSN: 0033-2496 LANGUAGE: Polish

8/3,AB/32 (Item 26 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

92022046 CA: 92(3)22046w PATENT
n-Alkylsulfonic acids
INVENTOR(AUTHOR): Kowalski, Antoni; Perkowski, Jan; Bogus, Wlodzimierz
LOCATION: Pol.
ASSIGNEE: Politechnika Lodzka; Instytut Ciezkiej Syntezy Organicznej "Blachownia"
PATENT: Poland PL 98841 DATE: 780831
APPLICATION: Poland PL 190997 DATE: 760707
PAGES: 3 pp. CODEN: POXXA7 LANGUAGE: Polish CLASS: C07C-143/02;

8/3,AB/33 (Item 27 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

91097423 CA: 91(12)97423e PATENT
Catalyst for liquid-phase isomerization of n-paraffins

INVENTOR(AUTHOR): Dalin, M. A.; Lobkina, V. V.; Plaksunova, S. L.
LOCATION: USSR
PATENT: USSR SU 671836 DATE: 790705
APPLICATION: USSR SU 2570398 DATE: 780120
CODEN: URXXAF LANGUAGE: Russian CITATION: Otkrytiya, Izobret., Prom. Obraztsy, Tovarnye Znaki 1979, (25), 22 CLASS: B01J-027/10; B01J-031/02;

8/3,AB/34 (Item 28 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

91041192 CA: 91(6)41192m PATENT
Dry cleaning or degreasing with a perchloroethylene-based composition
LOCATION: Fr.
ASSIGNEE: Rhone-Poulenc Industries S. A.
PATENT: Belgium BE 871618 DATE: 790427
APPLICATION: France FR 7819588 DATE: 780630
PAGES: 17 pp. CODEN: BEXXAL LANGUAGE: French CLASS: D06L;

8/3,AB/35 (Item 29 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

90140016 CA: 90(18)140016t PATENT
Separation of individual normal alkanes from petroleum starting materials
INVENTOR(AUTHOR): Matishev, V. A.
LOCATION: USSR
ASSIGNEE: Gubkin, I. M., Institute of the Petrochemical and Gas Industry, Moscow
PATENT: France Demande FR 2362804 DATE: 780324
APPLICATION: France FR 7626008 DATE: 760827
PAGES: 19 pp. CODEN: FRXXBL CLASS: C07C-009/00;

8/3,AB/36 (Item 30 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

89217833 CA: 89(26)217833w PATENT
n-Olefins
LOCATION: USA
ASSIGNEE: Texaco Development Corp.
PATENT: Netherlands Appl. NL 7613473 DATE: 780606
APPLICATION: Netherlands NL 7613473 DATE: 761203
PAGES: 9 pp. CODEN: NAXXAN CLASS: C07C-011/02;

8/3,AB/37 (Item 31 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

89196923 CA: 89(23)196923h JOURNAL
Improvement and increase in the selectivity of the oxidation of paraffin hydrocarbons to acids
AUTHOR(S): Perchenko, A. A.; Oberemko, A. V.
LOCATION: Vses. Nauchno-Issled. Proektn. Inst. Poverkhno-Akt. Veshchestv., Shebekino, USSR
JOURNAL: Neftekhimiya DATE: 1978 VOLUME: 18 NUMBER: 4 PAGES: 609-14
CODEN: NEFTAH ISSN: 0028-2421 LANGUAGE: Russian

8/3,AB/38 (Item 32 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

89149315 CA: 89(18)149315b PATENT
Catalytic cracking and dehydrocyclizing of alkanes using alkaline earth oxides promoted with manganese oxide and/or rhenium oxide
INVENTOR(AUTHOR): Heckelsberg, Louis F.
LOCATION: USA
ASSIGNEE: Phillips Petroleum Co.
PATENT: United States US 4093536 DATE: 780606
APPLICATION: United States US 460935 DATE: 740415
PAGES: 6 pp. CODEN: USXXAM CLASS: 208121000; C10G-011/04;

8/3,AB/39 (Item 33 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

88055535 CA: 88(8)55535a PATENT
Sodium-manganese homogeneous catalyst for oxidation of paraffinic hydrocarbons
INVENTOR(AUTHOR): Gubanova, V. A.; Stepanyants, S. A.; Mishchuk, A. A.; Pigul'skii, A. A.; Bokhanov, D. F.; Ravikovich, R. S.; Zhilenko, D. D.; Bykovskaya, E. E.; Sysuev, I. A.; Chuprynina, A. I.
LOCATION: USSR
ASSIGNEE: Berdyansk Experimental Petroleum-Oil Plant
PATENT: USSR SU 577048 DATE: 771025
APPLICATION: USSR SU 1934882 DATE: 730615
CODEN: URXXAF CITATION: Otkrytiya, Izobret., Prom. Obraztsy, Tovarnye Znaki 1977, 54(39), 19 CLASS: B01J-023/02;

8/3,AB/40 (Item 34 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

87039026 CA: 87(5)39026j JOURNAL
Effect of chloroalkanes on the activity of an aluminosilicate catalyst during isomerization of m-xylene
AUTHOR(S): Egiazarov, Yu. G.; Savchits, M. F.; Isaev, B. N.; Potapova, L. L.; Paushkin, Ya. M.
LOCATION: USSR
JOURNAL: Khim. Prom-st. (Moscow) DATE: 1977 NUMBER: 4 PAGES: 256-8
CODEN: KPRMAW LANGUAGE: Russian

8/3,AB/41 (Item 35 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

86056559 CA: 86(10)56559g PATENT
Cycloolefin metathesis catalyst
INVENTOR(AUTHOR): Ofstead, Eilert A.
LOCATION: USA
ASSIGNEE: Goodyear Tire and Rubber Co.
PATENT: United States US 3997471 DATE: 761214
APPLICATION: United States US 456912 DATE: 740401
PAGES: 6 pp. Division of U.S. 3,935,179. CODEN: USXXAM CLASS: 252429000B; B01J-031/02;

8/3,AB/42 (Item 36 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

85123262 CA: 85(17)123262z JOURNAL
Increase in the thermal stability of boric acid during the oxidation of paraffins by additives of fatty acid salts
AUTHOR(S): Zubko, B. I.; Sukhopar, P. A.
LOCATION: USSR
JOURNAL: Khim. Prom-st. (Moscow) DATE: 1976 NUMBER: 7 PAGES: 496-8
CODEN: KPRMAW LANGUAGE: Russian

8/3,AB/43 (Item 37 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

84018947 CA: 84(4)18947h PATENT
Laminates with adhesives containing aliphatic nitro compounds
INVENTOR(AUTHOR): Hausch, Walter R.; Fieldhouse, John W.; Kay, Edward L.
LOCATION: USA
ASSIGNEE: Firestone Tire and Rubber Co.
PATENT: United States US 3916072 DATE: 751028
APPLICATION: United States US 383733 DATE: 730730
PAGES: 5 pp. Division of U.S. 3,880,808. CODEN: USXXAM CLASS: 428-423; B32B

8/3,AB/44 (Item 38 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

82003739 CA: 82(1)3739b PATENT
Olefin oligomerization catalysts
INVENTOR(AUTHOR): Draguez Tripels de Hault, Emmanuel R. E. G.; Van Tongelen, Marcel; Debus, Henri R.
ASSIGNEE: Labofina S. A.
PATENT: Germany Offen. DE 2410851 DATE: 740926
APPLICATION: Belgium BE 128508 DATE: 730308
PAGES: 14 pp. CODEN: GWXXBX CLASS: B 01j; C 08f

8/3,AB/45 (Item 39 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

81065126 CA: 81(12)65126n PATENT
Textile assistant for processing fiber and textile goods
INVENTOR(AUTHOR): Kato, Yasuharu; Matsueda, Kohichi
ASSIGNEE: Takemoto Oil and Fat Co., Ltd.
PATENT: Japan Tokkyo Koho JP 7332637 DATE: 731008
APPLICATION: Japan JP 7039748 DATE: 700512
PAGES: 6 pp. CODEN: JAXXAD CLASS: C 10m; D 06m; B 29h

8/3,AB/46 (Item 40 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

77100932 CA: 77(15)100932p PATENT
1,5,9-Cyclododecatriene by continuous trimerization of butadiene
INVENTOR(AUTHOR): Koch, Theodore Augur; Eleuterio, Herbert Sousa
ASSIGNEE: du Pont de Nemours, E. I., and Co.

PATENT: Germany Offen. DE 2026043 DATE: 701203
APPLICATION: United States US 829140 DATE: 690529
PAGES: 14 pp. CODEN: GWXXBX CLASS: C 07c

8/3,AB/47 (Item 41 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

69086336 CA: 69(21)86336y PATENT
Iodoperfluoroalkane fluorides as promotors of telemerization of iodoperfluoroalkanes with olefins
INVENTOR(AUTHOR): Rondestvedt, Christian S.
ASSIGNEE: du Pont de Nemours, E. I., and Co.
PATENT: United States US 3377390 DATE: 680409
APPLICATION: United States DATE: 660502
PAGES: 9 pp. CODEN: USXXAM CLASS: 260-653

?DS

Set	Items	Description
S1	41120	"ALKANE"
S2	1403	"CORDYCEPIN"
S3	42523	S1 OR S2
S4	362260	PRIMER? OR OLIGONUCLEOTIDE? OR PROMOTER? OR PROMOTOR?
S5	404450	S3 OR S4
S6	333	S3 AND S4
S7	50	S3 (2N) S4
S8	47	RD (unique items)

?S PRIMER(W)EXTENSION OR POLYMERASE

	47767	PRIMER
	119641	EXTENSION
	11470	PRIMER(W)EXTENSION
	256456	POLYMERASE
S9	265676	PRIMER(W)EXTENSION OR POLYMERASE

?S S6 AND S9

	333	S6
	265676	S9
S10	42	S6 AND S9

?S S10 NOT S8

	42	S10
	47	S8
S11	42	S10 NOT S8

?RD

>>>Duplicate detection is not supported for File 342.
>>>Duplicate detection is not supported for File 348.

>>>Records from unsupported files will be retained in the RD set.
...completed examining records
     S12   28 RD (unique items)
?T S12/3,AB/1-28

>>>No matching display code(s) found in file(s): 342, 399

 12/3,AB/1   (Item 1 from file: 55)
DIALOG(R)File 55:BIOSIS PREVIEWS(R)

12126341   BIOSIS Number: 98726341
  Assessment of the biodegradation potential of psychrotrophic microorganisms
  Whyte L G; Greer C W; Inniss W E
  Biotechnol. Res. Inst., National Res. Council, 6100 Royalmount Ave., Montreal, PQ H4P 2R2, Canada
  Canadian Journal of Microbiology 42 (2). 1996. 99-106.
  Full Journal Title: Canadian Journal of Microbiology
  ISSN: 0008-4166
  Language: ENGLISH
  Print Number: Biological Abstracts Vol. 101 Iss. 008 Ref. 110616
  Bioremediation of polluted temperate and cold temperature environments may require the activity of psychrotrophic bacteria, because their low temperature growth range parallels the ambient temperatures encountered in these environments. In the present study, 135 psychrotrophic microorganisms isolated from a variety of ecosystems in Canada were examined for their ability to mineralize 14C-labelled toluene, naphthalene, dodecane, hexadecane, 2-chlorobiphenyl, and pentachlorophenol. A number of the psychrotrophic strains mineralized toluene, naphthalene, dodecane, and hexadecane. None of the psychrotrophs were capable of mineralizing 2-chlorobiphenyl or pentachlorophenol. Those strains demonstrating mineralization activity were subsequently screened by the polymerase chain reaction (PCR) and Southern hybridization of PCR products for the presence of catabolic genes (alkB, ndoB, todC1, and xylE) involved in known bacterial biodegradative pathways for these compounds. Some of the psychrotrophs able to mineralize toluene and naphthalene possessed catabolic genes that hybridized to xylE or todC1, and ndoB, respectively. The alkB PCR fragments obtained from the strains that mineralized dodecane and hexadecane did not hybridize to an alkB gene probe derived from Pseudomonas oleovorans. Psychrotrophic strain Q15, identified as a Rhodococcus sp., also mineralized the C-28 n-paraffin octacosane. A gene probe constructed from the "alkB" PCR fragment from strain Q15 did

hybridize with the alkB PCR fragments from most of the psychrotrophic alkane biodegraders, indicating that the alkB primers may be amplifying another gene(s), perhaps with low homology to P. oleovorans alkB, which may be involved in the biodegradation of both short chain (dodecane) and longer chain alkanes (hexadecane, octacosane). All of the psychrotrophic biodegradative isolates examined were capable of mineralization activity at both 23 and 5 degree C, indicating their potential for low temperature bioremediation of petroleum hydrocarbon contaminated sites.

12/3,AB/2 (Item 2 from file: 55)
DIALOG(R)File 55:BIOSIS PREVIEWS(R)

11678042 BIOSIS Number: 98278042
The in vitro replication of synthetic modified oligonucleotides
Drutsa V L; Bednarek P Z; Koroleva O N
A.N. Belozerskii Res. Inst. Phys.-Chem. Biol., Mosc. State Univ., Vorob'evy gory, Korp. A, 119899 Moscow, Russia
Bioorganicheskaya Khimiya 20 (11). 1994. 1206-1217.
Full Journal Title: Bioorganicheskaya Khimiya
ISSN: 0132-3423
Language: RUSSIAN
Print Number: Biological Abstracts Vol. 100 Iss. 001 Ref. 002880
The in vitro replication of synthetic oligodeoxyribonucleotides carrying internucleotide polyphosphate groups or alkanediol "spacers" of various sizes with the use of various DNA polymerases has been studied. All modifications, except for the diphosphate group, almost completely block the polymerization process. In the case of AMV reverse transcriptase, Taq and T7 DNA polymerases and also the Klenow fragment of E. coli DNA polymerase I, a template-independent addition of a nucleotide at the 3' end of the incomplete replica was observed. T4 DNA polymerase, displaying the strongest 3'-5' exonuclease activity among the polymerases studied, did not incorporate additional nucleotides. The use of oligonucleotides with non-nucleotide inserts as primers in polymerase chain reaction (PCR) allows to obtain DNA copies with protruding 5'-termini, suitable for hybridisation analysis.

12/3,AB/3 (Item 3 from file: 55)
DIALOG(R)File 55:BIOSIS PREVIEWS(R)

7770930 BIOSIS Number: 90138930
REDUCTION OF THE POTENT DNA POLYMERASE III HOLOENZYME 3'-5' EXONUCLEASE ACTIVITY BY TEMPLATE-PRIMER ANALOGUES
GRIEP M A; REEMS J A; FRANDEN M A; MCHENRY C S

DEP. BIOCHEM. BIOPHYSICS GENETICS, UNIV. COLORADO HEALTH SCI. CENTER, DENVER, COLO. 80262.

BIOCHEMISTRY 29 (38). 1990. 9006-9014. CODEN: BICHA

Full Journal Title: Biochemistry

Language: ENGLISH

The DNA polymerase III holoenzyme of Escherichia coli contains a potent 3'.fwdarw.5' exonuclease that removes the terminal nucleotide from a synthetic deoxyoligonucleotide primer with a half-life of approximately 2 s. Degradation of primers could not be effectively prevented by permitting the holoenzyme to "idle" at the primer terminus in the presence of limited deoxynucleoside triphosphates. To further characterize this exonuclease and to develop stable primers of facilitate experimental manipulations, we synthesized a series of twelve 25-mer oligonucleotides that differed only in the two 3'-terminal residues. The penultimate position contained either a CMP or a dCMP residue, while at the terminal position either AMP, dAMP, 2',3'-dideoxyAMP, cordycepin (3'-dAMP), dAMP.alpha.S, or 2',3'-dideoxyAMP.alpha.S was incorporated. No single change at either the 3'-penultimate or 3'-terminal positions resulted in a decrease in the exonuclease rate greater than 10-fold; however, combined changes at these two sites resulted in a strong synergistic effect. Placing a ribonucleotide at the penultimate position coupled by a phosphorothioate linkage to a terminal 2',3'-dideoxynucleotide reduced the rate of exonucleolytic activity almost 30,000-fold (half-life .apprx. 16 h). If only the ribonucleotide and phosphorothioate substitutions were made, a primer capable of being efficiently elongated was generated that exhibited a 500-fold increase in stability (half-life = 40 min). The elemental effect observed by substituting a nonbridging oxygen in the terminal phosphodiester bond for sulfur increased from 1.5 to 200 as other substitutions were made that decreased the exonuclease rate. This was consistent with a change in the rate-limiting step of the exonuclease reaction from a conformational change to the chemical step where the covalent bond is cleaved. At least part of this effect appears to be due to perturbations within the enzyme's active site and not solely due to changes in electrophilicity.

12/3,AB/4 (Item 4 from file: 55)
DIALOG(R)File 55:BIOSIS PREVIEWS(R)

7064867 BIOSIS Number: 87125388

THE PSEUDOMONAS-OLEOVORANS ALKANE HYDROXYLASE GENE SEQUENCE AND EXPRESSION

KOK M; OLDENHUIS R; VAN DER LINDEN M P G; RAATJES P; KINGMA J; VAN LELYVELD P H; WITHOLT B

GRONINGEN BIOTECHNOL. CENT., UNIV. GRONINGEN, NIJENBORGH 16, 9747AG GRONINGEN, NETHERLANDS.

J BIOL CHEM 264 (10). 1989. 5435-5441. CODEN: JBCHA
Full Journal Title: Journal of Biological Chemistry
Language: ENGLISH

We have identified and sequenced the Pseudomonas OCT plasmid-encoded alkane hydroxylase gene (alkB) and its promoter. The transcription initiation site of the alkBAC mRNA was determined by nuclease S1 mapping. A putative interaction site with RNA-polymerase was identified based on homology of the alk promoter with order Pseudomonas promoters. The alkB gene encodes a 401-amino acid polypeptide which, despite an unusual codon composition, can be expressed at high levels in Escherichia coli and Pseudomonas. The amino-terminal sequence of the purified cytoplasmic membrane alkane hydroxylase was determined and was found to be in agreement with the nucleotide sequence. The translation product of the alkB gene contains nine hydrophobic sequences of which eight are sufficiently long to be membrane-spanning segments. The amino-terminal sequence resembles that of several bacterial intergral membrane proteins and is not cleaved off following translation.

12/3,AB/5 (Item 5 from file: 55)
DIALOG(R)File 55:BIOSIS PREVIEWS(R)

6581534 BIOSIS Number: 86048085
VACCINIA VIRUS POLYADENYLATED POLYMERASE SPECIFICITY FOR NUCLEOTIDES AND NUCLEOTIDE ANALOGS

SHUMAN S; MOSS B
LAB. VIRAL DIS., NATL. INST. ALLERGY INFECTIOUS DIS., NIH, BETHESDA, MD. 20892.

J BIOL CHEM 263 (17). 1988. 8405-8412. CODEN: JBCHA
Full Journal Title: Journal of Biological Chemistry
Language: ENGLISH

We have studied the nucleotide specificity of vaccinia virus poly(A) polymerase using a novel primer extension assay. Oligoribonucleotide primers labeled at the 5' end with 32P were elongated by the enzyme in the presence of ATP, leading to the 3' addition of > 1000 adenylate residues/primer molecule. In the presence of UTP, the enzyme catalyzed 3' polymerization of long poly(U) tails, albeit at a reduced rate of chain growth. In the presence of both ATP and UTP, 3' addition was selective for ATP. The transient accumulation of RNAs elongated by 10-16 residues suggested that polyadenylation (and polyuridylation) was a biphasic reaction. Quantitative 3' addition of GMP (from GTP) or CMP (from CTP) to the primer was also observed, although the rate of chain growth was so slow as to allow synthesis of only short oligo(G) or oligo(C) tails. The deoxynucleotides 3'-dATP (cordycepin triphosphate) and ddATP were markedly inhibitory to poly(A) polymerase. Primer elongation studies were consistent with inhibition due to 3' incorporation of inhibitor and chain termination.

Incubation of enzyme with [.alpha.-32P] cordycepin triphosphate resulted in labeling of the Mr 57,000 enzyme subunit, apparently via formation of a covalent nucleotidyl-protein complex. These data are discussed in light of their implications for the catalytic mechanism of polyadenylation.

12/3,AB/6 (Item 6 from file: 55)
DIALOG(R)File 55:BIOSIS PREVIEWS(R)

5343887 BIOSIS Number: 81111194
MINUS-STRAND INITIATION BY BROME MOSAIC VIRUS REPLICASE WITHIN THE 3' TRANSFER RNA-LIKE STRUCTURE OF NATIVE AND MODIFIED RNA TEMPLATES
MILLER W A; BUJARSKI J J; DREHER T W; HALL T C
DEP. BIOL., TEX. A AND M UNIV., COLLEGE STATION, TEX. 77843-3258, USA.
J MOL BIOL 187 (4). 1986. 537-546. CODEN: JMOBA
Full Journal Title: Journal of Molecular Biology
Language: ENGLISH
An RNA-dependent RNA polymerase (replicase) extract from brome mosaic virus-infected barley leaves has been shown to initiate syntehsis of (-) sense RNA from (+) sense virion RNA. Initiation occurred de novo, as demonstrated by the incorporation of [.gamma.-32P]GTP into the product. Sequencing using cordycepin triphosphate to terminate (-) strands during their synthesis by the replicase generated sequence ladders that confirmed that copying was accurate, and that initiation occurred very close to the 3' end. The precise site of initiation was further defined by testing the replicase template activity after stepwise removal of 3'-terminal nucleotides. Whereas removal of the terminal A did not decrease template activity, removal of the next nucleotide (C-2) did. Thus, initiation almost certainly occurs opposite the penultimate 3'-nucleotide (C-2) in vitro. The structure of the double-stranded replicative form of RNA isolated from brome mosaic virus-infected leaves was consistent with such a mechanism occurring in vivo, in that it lacked the 3'-terminal A found on virion RNAs. The specific site of (-) strand initiation and normal template activity were retained for RNAs with as many as 15 to 30 A residues added to the 3' end. However, only limited oligonucleotide 3' extensions can be present on active templates. In order to assess the 5' extent of sequences required for an active template, a 134-nucleotide-long fragment of brome mosaic virus RNA, corresponding to the tRNA-like structure, was generated. This RNA had high template activity, but a shorter 3' (85-nucleotide) fragment was inactive. RNAs with various heterologus sequences 5' to position 134 also showed high template activity. Thus, the 3'-terminal tRNA-like structure common to all four brome mosaic virus virion RNAs contains all of the signals required for initiation of replication, and sequences 5' to it do not play a role in template selection.

12/3,AB/7 (Item 1 from file: 50)
DIALOG(R)File 50:CAB Abstracts

02367845 CAB Accession Number: 910741745
Further biochemical characterization of wheat DNA primase: possible functional implication of copurification with DNA polymerase A.
Laquel, P.; Castroviejo, M.; Litvak, S.
Laboratoire de Biologie Moleculaire Vegetale, IBCN-CNRS, 33077 Bordeaux, France.
Nucleic Acids Research vol. 18 (16): p.4867-4876
Publication Year: 1990
ISSN: 0305-1048
Language: English
Document Type: Journal article
The chromatographic behaviour of wheat DNA primase and its co-purification with DNA polymerase A are described. The pH, Mg2+, Mn2+ and temp. optima of the enzyme were determined. DNA primase was strongly inhibited by KCl, cordycepin triphosphate and dATP and to a lesser extent by cAMP and formycin triphosphate. The primase product reaction was resistant to DNAase digestion and sensitive to ribonuclease digestion. Primase catalysed primer synthesis on M13 ssDNA as template allowing Escherichia coli DNA polymerase I to replicate the primed M13 single-stranded DNA leading to double-stranded M13 DNA. In M13 polymerase replication experiments with wheat DNA polymerases A, B, CI and CII, only DNA polymerase A could recognize RNA-primed M13 ssDNA. 57 ref.

12/3,AB/8 (Item 2 from file: 50)
DIALOG(R)File 50:CAB Abstracts

01405476 CAB Accession Number: 840754255
Synthesis of poly(A) polymerase from conserved messenger RNA in germinating excised embryos of wheat.
Lakhani, S.; Thiru, A. N.; Sachar, R. C.
Dep. of Bot., Delhi Univ., Delhi 110 007, India.
Phytochemistry vol. 22 (7): p.1561-1566
Publication Year: 1983
ISSN: 0031-9422
Language: English
Document Type: Journal article
A 3.5- to 6.0-fold stimulation of poly(A) polymerase activity was observed in excised wheat embryos germinated for 48 h. Addition of primer RNA to the enzyme assay mixture was necessary for the incorporation of 3H-AMP into the acid-precipitable polyadenylate product. Administration of 6 amino acid analogues (1 mm each) or cycloheximide (10 micro g/ml) to the

germinating embryos resulted in 77-82% inhibition of poly(A) polymerase activity. The inhibitory response, elicited by the analogues, was substantially counteracted by the simultaneous addition of the corresponding 6 amino acids (2 mm each). This indicated that de novo protein synthesis was necessary for the enhancement of poly(A) polymerase activity. Cordycepin, a potent inhibitor of transcription, failed to block poly(A) polymerase activity; instead, the drug invariably brought about a significant stimulation (c. 1.7- to 4.0-fold) of the enzyme activity. Cordycepin, however, inhibited acid phosphatase activity by 77% in germinating wheat embryos. Actinomycin D also failed to inhibit poly(A) polymerase activity in germinating wheat embryos. The lack of inhibition of poly(A) polymerase by transcriptional inhibitors during early germination suggested that the enzyme was translated from its conserved mRNA, already stored in the dry wheat embryos. 43 ref.

12/3,AB/9 (Item 1 from file: 72)
DIALOG(R)File 72:EMBASE

8527982 EMBASE No: 92203863
Inhibition of human immunodeficiency virus type 1 reverse transcriptase by 3'-blocked oligonucleotide primers
Austermann S.; Kruhoffer M.; Grosse F.
Department of Virology/Immunology, German Primate Centre, Kellnerweg 4, W-3400 Gottingen Germany
BIOCHEM. PHARMACOL. (United Kingdom) , 1992, 43/12 (2581-2589) CODEN: BCPCA ISSN: 0006-2952 ADONIS ORDER NUMBER: 000629529200360P
LANGUAGES: English SUMMARY LANGUAGES: English
Human immunodeficiency virus type 1 (HIV-1) reverse transcriptase (RT) (EC 2.7.7.49) with a high specific activity has been purified from the overexpressing Escherichia coli strain DH5alpha(pJS3.7). Steady-state kinetics of DNA synthesis catalysed by RT were analysed on polyriboadenylate 20-mer of (3'-5')deoxythymidylate (poly(rA).(dT)20) and polyribouridylate 20-mer of (3'-5')deoxyadenylate (poly(rU).(dA)20) homopolymeric template-primers. K(m) values of 40 and 140 nM (3'-OH ends) and k(cat) values of 4 and 0.14 sec-1 were determined for the two different substrates. Oligonucleotide primers (dA)20 and (dT)20 were elongated in a terminal transferase-catalysed reaction (EC 2.7.7.31) with ddATP, 3'-dATP (cordycepin), 2' ,3'-epoxy-ATP and arabino-ATP; and ddTTP, 3'-azido-TTP, 3'-dUTP, 3'-F-dTTP and rUTP, respectively. The resulting oligonucleotides were hybridized to their complementary templates and the inhibitory potential of these compounds towards DNA synthesis started from unchanged primers was measured. Oligonucleotides with unextendable 3, groups were shown to act as strong inhibitors of DNA synthesis catalysed by HIV-1 RT. In particular, poly(rA).(dT)20-(ddTMP) and poly(rU).(dA)20-(3'-dAMP) were potent competitive inhibitors, displaying K(i) values of about 6 and 12 nM,

respectively. Also 3'-azido-, and 3'-fluoro-terminated oligonucleotides showed competitive inhibition with inhibition constants in the range of 20-35 nM. In contrast, 2',3'-epoxy-terminated (dA)21 displayed a mixed-type inhibition with a K(i) value of 67 nM. Arabino-terminated (dA)21 was found to be an uncompetitive inhibitor of HIV-1 RT with an inhibition constant of 318 nM. Arabino-terminated primers did not act as strict chain terminators because they could be elongated by HIV-1 RT. This study provides information on the structure-activity relationship of modified 3'-termini of primer molecules which might be exploited as inhibitors of HIV in the future.

12/3,AB/10 (Item 2 from file: 72)
DIALOG(R)File 72:EMBASE

8103103 EMBASE No: 91131391
Cordycepin analogues of 2',5'-oligoadenylate inhibit human immunodeficiency virus infection via inhibition of reverse transcriptase
Muller W.E.G.; Weiler B.E.; Charubala R.; Pfleiderer W.; Leserman L.; Sobol R.W.; Suhadolnik R.J.; Schroder H.C.
Institut fur Physiologische Chemie, Abteilung Angewandte Molekularbiologie, Johannes Gutenberg-Universitat, Duesbergweg 6, D-6500 Mainz Germany, Federal Republic of
BIOCHEMISTRY (USA) , 1991, 30/8 (2027-2033) CODEN: BICHA ISSN: 0006-2960
LANGUAGES: English
Analogues of 2',5'-oligoadenylates (2-5A), the cordycepin (3'-deoxyadenosine) core trimer (Co3) and its 5'-monophosphate derivative (pCo3), were shown to display pronounced anti-human immunodeficiency virus type 1 (HIV-1) activity in vitro. Treatment of HIV-1 infected H9 cells with 1 microM Co3 or pCo3 resulted in an almost 100% inhibition of virus production. The compounds were encapsulated in liposomes targeted by antibodies specific for the T-cell receptor molecule CD3. Substitution of one or two cordycepin units in Co3 or pCo3 decreased the antiviral activity of the compounds. pCo3 did not stimulate 2-5A-dependent ribonuclease L activity and displayed no effect on the amount of cellular RNA and protein. At a concentration of 10 microM the cellular DNA polymerases alpha, beta, and gamma were almost insensitive toward Co3 or pCo3. In contrast, these compounds reduced the activity of HIV-1 reverse transcriptase (RT) by 90% at a concentration of 10 microM if the viral RNA genome and the cellular tRNA(Lys.3) was used as template/primer system; if the synthetic poly(A).(dT)10 was used as template/primer, no marked inhibition was observed. Dot-blot, gel-retardation, and cross-linking assays showed that Co3 or pCo3 interfere with the binding site of tRNA(Lys.3) to RT. These results indicate that inhibition of RT at the level of initiation of the enzymic reaction is a novel approach to inhibit HIV-1 replication.

12/3,AB/11 (Item 3 from file: 72)
DIALOG(R)File 72:EMBASE

7883100 EMBASE No: 90317888
Reduction of the potent DNA polymerase III holoenzyme 3'right arrow5' exonuclease activity by template-primer analogues
Griep M.A.; Reems J.A.; Franden M.A.; McHenry C.S.
Department of Biochemistry, Biophysics and Genetics, University of Colorado Health Sciences Center, Denver, CO 80262 USA
BIOCHEMISTRY (USA) , 1990, 29/38 (9006-9014) CODEN: BICHA ISSN: 0006-2960
LANGUAGES: English
The DNA polymerase III holoenzyme of Escherichia coli contains a potent 3'right arrow5' exonuclease that removes the terminal nucleotide from a synthetic deoxyoligonucleotide primer with a half-life of approximately 2 s. Degradation of primers could not be effectively prevented by permitting the holoenzyme to 'idle' at the primer terminus in the presence of limited deoxynucleoside triphosphates. To further characterize this exonuclease and to develop stable primers to facilitate experimental manipulations, we synthesized a series of twelve 25-mer oligonucleotides that differed only in the two 3'-terminal residues. The penultimate position contained either a CMP or a dCMP residue, while at the terminal position either AMP, dAMP, 2',3'-dideoxyAMP, cordycepin (3'-dAMP), dAMPalphaS, or 2',3'-dideoxyAMPalphaS was incorporated. No single change at either the 3'-penultimate or 3'-terminal positions resulted in a decrease in the exonuclease rate greater than 10-fold; however, combined changes at these two sites resulted in a strong synergistic effect. Placing a ribonucleotide at the penultimate position coupled by a phosphorothioate linkage to a terminal 2',3'-dideoxynucleotide reduced the rate of exonucleolytic activity almost 30000-fold (half-life similar 16 h). If only the ribonucleotide and phosphorothioate substitutions were made, a primer capable of being efficiently elongated was generated that exhibited a 500-fold increase in stability (half-life = 40 min). The elemental effect observed by substituting a nonbridging oxygen in the terminal phosphodiester bond for sulfur increased from 1.5 to 200 as other substitutions were made that decreased the exonuclease rate. This was consistent with a change in the rate-limiting step of the exonuclease reaction from a conformational change to the chemical step where the covalent bond is cleaved. At least part of this effect appears to be due to perturbations within the enzyme's active site and not solely due to changes in electrophilicity.

12/3,AB/12 (Item 4 from file: 72)
DIALOG(R)File 72:EMBASE

7162627 EMBASE No: 88161553

Vaccinia virus poly(A) polymerase. Specificity for nucleotides and nucleotide analogs

Shuman S.; Moss B.

Laboratory of Viral Diseases, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, MD 20892 USA

J. BIOL. CHEM. (USA) , 1988, 263/17 (8405-8412) CODEN: JBCHA ISSN: 0021-9258

LANGUAGES: English

We have studied the nucleotide specificity of vaccinia virus poly(A) polymerase using a novel primer extension assay. Oligoribonucleotide primers labeled at the 5' end with 32P were elongated by the enzyme in the presence of ATP, leading to the 3' addition of >1000 adenylate residues/primer molecule. In the presence of UTP, the enzyme catalyzed 3' polymerization of long poly(U) tails, albeit at a reduced rate of chain growth. In the presence of both ATP and UTP, 3' addition was selective for ATP. The transient accumulation of RNAs elongated by 10-16 residues suggested that polyadenylation (and polyuridylation) was a biphasic reaction. Quantitative 3' addition of GMP (from GTP) or CMP (from CTP) to the primer was also observed, although the rate of chain growth was so slow as to allow synthesis of only short oligo(G) or oligo(C) tails. The deoxynucleotides 3'-dATP (cordycepin triphosphate) and ddATP were markedly inhibitory to poly(A) polymerase. Primer elongation studies were consistent with inhibition due to 3' incorporation of inhibitor and chain termination. Incubation of enzyme with (alpha-32P)cordycepin triphosphate resulted in labeling of the M(r) 57,000 enzyme subunit, apparently via formation of a covalent nucleotidyl-protein complex. These data are discussed in light of their implications for the catalytic mechanism of polyadenylation.

12/3,AB/13 (Item 1 from file: 76)

DIALOG(R)File 76:Life Sciences Collection

01460839 2466581

Reduction of the potent DNA polymerase III holoenzyme 3' arrow right 5' exonuclease activity by template-primer analogues.

Griep, M.A.; Reems, J.A.; Franden, M.A.; McHenry, C.S.

Dep. Biochem., Biophys., and Genet., Univ. Colorado Health Sci. Cent., Denver, CO 80262, USA

BIOCHEMISTRY (WASH.). vol. 29, no. 38, pp. 9006-9014 (1990.)

DOCUMENT TYPE: Journal article LANGUAGE: ENGLISH

SUBFILE: Microbiology Abstracts Section B: Bacteriology; Biochemistry Abstracts Part 2: Nucleic Acids

The DNA polymerase III holoenzyme of Escherichia coli contains a potent 3' arrow right 5' exonuclease that removes the terminal nucleotide from a synthetic deoxyoligonucleotide primer with a half-life of approximately 2 s. To further characterize this exonuclease and to develop stable primers to facilitate experimental manipulations, we synthesized a series of twelve 25-mer oligonucleotides that differed only in the two 3'-terminal residues. The penultimate position contained either a CMP or a dCMP residue, while at the terminal position either AMP, dAMP, 2',3'-dideoxyAMP, cordycepin (3'-dAMP), dAMP alpha S, or 2',3'-dideoxyAMP alpha S was incorporated. No single change at either the 3'-penultimate or 3'-terminal positions resulted in a decrease in the exonuclease rate greater than 10-fold however, combined changes at these two sites resulted in a strong synergistic effect. Placing a ribonucleotide at the penultimate position coupled by a phosphorothioate linkage to a terminal 2',3'-dideoxynucleotide reduced the rate of exonucleolytic activity almost 30 000-fold (half-life) similar to 16 h).

12/3,AB/14 (Item 2 from file: 76)
DIALOG(R)File 76:Life Sciences Collection

00785422 0799987
Complex RNA chain elongation kinetics by wheat germ RNA polymerase II.
Job, D.; Durand, R.; Job, C.; Teissere, M.
Cent. Biochim. et Biol. Mol., CBM 2, Cent. Natl. Rech. Sci., 31, Chemin Joseph Aiguier, 13402 Marseille Cedex 9, France
NUCLEIC ACIDS RES. vol. 12, no. 7, pp. 3303-3321 (1984.)
DOCUMENT TYPE: Journal article LANGUAGE: ENGLISH
SUBFILE: Genetics Abstracts; Biochemistry Abstracts Part 2: Nucleic Acids

Kinetics of RNA chain elongation catalyzed by wheat germ RNA polymerase II have been studied using various synthetic DNA templates in the presence of excess dinucleotide monophosphate primers. With single- or double-stranded homopolymer templates, the double reciprocal plots 1/(velocity) as a function of 1/(nucleotide substrate) exhibit positive, negative or no curvature. With poly(dAT) as template, the mechanism of nucleoside monophosphate incorporation into RNA is not the ping-pong kinetic mechanism which was derived for E. coli RNA polymerase. Noncomplementary nucleoside triphosphates inhibit RNA transcription allosterically. Cordycepin triphosphate behaves as ATP, and not only inhibits AMP incorporation but also that of UMP and GMP on appropriate templates. The reason for this complex kinetic behavior is not yet understood.

12/3,AB/15 (Item 1 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

09542270 96063870

Use of vaccinia virus poly(A) polymerase for RNA 3'-end labeling with a chain-terminating nucleotide or a short 3' homopolymer tract.

Thomson JG; Gershon PD

Institute of Biosciences and Technology, Texas A&M University, Houston, USA.

Biotechniques (UNITED STATES) Sep 1995, 19 (3) p416-20, 422-5, ISSN 0736-6205 Journal Code: AN3

Languages: ENGLISH

Document type: TECHNICAL REPORT

Conditions are described for the 3'-end labeling of RNA with 32P 3'-dATP (3'-deoxyadenosine-5'-triphosphate), a chain-terminating nucleotide, using the poly(A) polymerase (PAP) encoded by vaccinia virus. Reaction time, divalent cation species and concentration, and the requirement for both subunits of the PAP were investigated. In the presence of Mn2+, vaccinia PAP is able to tail RNA primers with tracts of 3'-oligo(U), oligo(C) and oligo(G). Conditions for the addition of labeled 3'-homopolymer tracts were characterized. The use of low nucleotide concentrations in this study revealed an apparently fixed divalent cation concentration optimum of 0.1 mM, distinct from the previously noted requirement for a 1:1 divalent cation:NTP complex. This indicates a possible requirement for multiple divalent cations in nucleotidyl transfer by vaccinia PAP.

12/3,AB/16 (Item 2 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

09470011 95400011

Evidence that the expression of the gene for NADPH-cytochrome P-450 reductase is n-alkane-inducible in Candida maltosa.

Ohkuma M; Masuda Y; Park SM; Ohtomo R; Ohta A; Takagi M

Department of Agricultural Chemistry, University of Tokyo, Japan.

Biosci Biotechnol Biochem (JAPAN) Jul 1995, 59 (7) p1328-30, ISSN 0916-8451 Journal Code: BDP

Languages: ENGLISH

Document type: JOURNAL ARTICLE

A gene coding for NADPH-cytochrome P-450 reductase of an n-alkane-assimilating yeast, Candida maltosa, was isolated and sequenced. Northern analysis and assay of the expression of the reporter gene under the control of the promoter of this gene showed that the transcriptional level was induced 4 to 8-fold in cells grown on n-alkane relative to cells grown on glucose.

12/3,AB/17 (Item 3 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

09249789 95179789

Homologous maturase-like proteins are encoded within the group I introns in different mitochondrial genes specifying Yarrowia lipolytica cytochrome c oxidase subunit 3 and Saccharomyces cerevisiae apocytochrome b.

Matsuoka M; Matsubara M; Kakehi M; Imanaka T

Department of Biotechnology, Faculty of Engineering, Osaka University, Japan.

Curr Genet (UNITED STATES) Nov-Dec 1994, 26 (5-6) p377-81, ISSN 0172-8083 Journal Code: CUG

Languages: ENGLISH

Document type: JOURNAL ARTICLE

A mitochondrial cox3 gene in the alkane yeast, Yarrowia lipolytica, encodes a subunit-3 protein of cytochrome c oxidase, and contains a 1044 base-pair-long intron, as compared with the corresponding intronless gene in Saccharomyces cerevisiae. The intron belongs to a group I intron as determined by the cDNA sequence for the splicing sites as well as the predicted RNA secondary structure. Remarkably, this intron could code for a protein of 206 amino-acid residues which showed 63% similarity with an RNA maturase encoded by the second intron of the mitochondrial apocytochrome b gene in S. cerevisiae. Both introns occurred within the conserved exon sequence, 5'-TT(G/C)AGGTGC-3', suggesting the possible transposition of a common ancestral intron.

12/3,AB/18 (Item 4 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

08567839 93277839

cDNA cloning, chromosomal mapping, and functional characterization of the human peroxisome proliferator activated receptor.

Sher T; Yi HF; McBride OW; Gonzalez FJ

Laboratory of Molecular Carcinogenesis, National Cancer Institute, Bethesda, Maryland 20892.

Biochemistry (UNITED STATES) Jun 1 1993, 32 (21) p5598-604, ISSN 0006-2960 Journal Code: A0G

Languages: ENGLISH

Document type: JOURNAL ARTICLE

The human peroxisome proliferator activated receptor (hPPAR) was cloned from a human liver cDNA library. The cDNA exhibited 85% and 91% DNA and deduced amino acid sequence identity with mouse PPAR (mPPAR), respectively. The hPPAR gene was mapped on human chromosome 22 slightly telomeric to a

linkage group of six genes and genetic markers that are located in the general region 22q12-q13.1. Cotransfection assays of mouse Hepa 1 cells were used to roughly compare the ability of hPPAR- and mPPAR-expressed cDNAs to trans-activate the acyl CoA oxidase (ACO) PPAR response element located 5' upstream to the minimal thymidine kinase promoter driving the expression of the chloramphenicol acetyl transferase (CAT) reporter gene. Both receptors elicited a response with the prototypical peroxisome proliferators nafenopin, clofibrate, and WY-14,643. Moreover, using cotransfection assays in which the CAT reporter plasmid contained the CYP4 A6 gene response element rather than the ACO element, it was shown that hPPAR is capable of very efficiently trans-activating a second PPAR response element. These results indicate that the PPAR is present in humans in a form that is functional and can trans-activate response elements derived from two different genes, the rat ACO and the rabbit CYP4A6.

12/3,AB/19 (Item 5 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

08158782 92296782
Characterization of a rabbit gene encoding a clofibrate-inducible fatty acid omega-hydroxylase: CYP4A6.
Muerhoff AS; Griffin KJ; Johnson EF
Department of Molecular and Experimental Medicine, Scripps Research Institute, La Jolla, California 92037.
Arch Biochem Biophys (UNITED STATES) Jul 1992, 296 (1) p66-72, ISSN 0003-9861 Journal Code: 6SK
Contract/Grant No.: HD04445, HD, NICHD; M01 RR00833, RR, NCRR
Languages: ENGLISH
Document type: JOURNAL ARTICLE
CYP4A6 mRNAs are induced in the rabbit liver and kidney following treatment with the antihyperlipidemic drug clofibrate. As a first step toward the elucidation of the mechanism controlling the induction of this and other CYP4A genes by clofibrate and other peroxisome proliferators, we have cloned and characterized the CYP4A6 gene. Genomic DNA containing the first 12 exons encoding CYP4A6 was isolated as three recombinant lambda phage, two of which were overlapping. The sequence of more than 1000 bp of the 5' upstream region as well as of the first 12 exons has been determined. These 12 exons encode all but approximately 80 bp at the 3' terminus of CYP4A6. Intron/exon junctions within the coding region of the gene are conserved relative to the rat CYP4A1 and CYP4A2 genes. Primer extension analysis indicates that transcription is initiated 33 bp upstream of the start codon. The CYP4A6 promoter region, like that of the rat CYP4A1 and CYP4A2 genes, does not contain a consensus TATA box. However, a consensus Sp1 recognition element is apparent at -46 bp upstream of the transcription start site. In addition, a sequence related to one of two

regulatory elements that control the induction of the rat acyl-CoA oxidase gene by ciprofibrate is present upstream of the CYP4A6 promoter.

12/3,AB/20 (Item 6 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

05715079 86016079
Poly(dAT) dependent trinucleotide synthesis catalysed by wheat germ RNA polymerase II. Effects of nucleotide substrates and cordycepin triphosphate.
Dietrich J; Teissere M; Job C; Job D
Nucleic Acids Res (ENGLAND) Sep 11 1985, 13 (17) p6155-70, ISSN 0305-1048 Journal Code: O8L
Languages: ENGLISH
Document type: JOURNAL ARTICLE
Kinetics of condensation of ribonucleotides to dinucleotides, leading to trinucleotide products formation, have been studied using wheat germ RNA polymerase II and poly(dAT). Assay conditions can be selected under which both ApUpA and UpApU are formed in catalytic amounts. The kinetic parameters associated with these reactions indicate that the rate of trinucleotide formation might be affected by DNA sequence, as reported for E.coli RNA polymerase. Kinetics of disappearance of ApUpA and UpApU were studied under experimental conditions allowing poly(rAU) synthesis. The results can be interpreted as if after formation of a phosphodiester bond, a slow isomerisation step of the ternary transcription complex could occur. During this step, transcription complexes could dissociate with a finite probability, releasing trinucleotides in an abortive pathway. The above results are discussed in the view that, under these experimental conditions, wheat germ RNA polymerase II catalyses poly(rAU) synthesis, as if it is a non-processive enzyme. Cordycepin triphosphate can be condensed to a dinucleotide primer, yielding ApUpA. However the ATP analogue cannot be incorporated into longer products than a trinucleotide. On the other hand 3'-dATP behaves as a very potent inhibitor of translocation, with an inhibition constant of 0.15 microM, a value which is two orders of magnitude smaller than the Km value corresponding to ATP utilization in poly(rAU) synthesis. Simple models are proposed which allow a comparison with E.coli RNA polymerase, for which the results are well documented.

12/3,AB/21 (Item 7 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

03828719 79205719
Polyadenylation of pea seed RNA at the early stages of germination.

Sieliwanowicz B
Acta Biochim Pol (POLAND) 1978, 25 (3) p239-45, ISSN 0001-527X Journal Code: 0B4
Languages: ENGLISH
Document type: JOURNAL ARTICLE

1. The RNA polyadenylating activity was found in embryo axes of dry, as well as imbibed and germinated pea seeds, both in nucleus and cytoplasm. 2. The total enzymatic activity remains unchanged during germination, but the intracellular distribution is altered; the activity in nuclei is increased about four-fold at the expense of the postmitochondrial fraction. 3. Specificity towards RNA primers of the polyadenylating system from pea embryo axes is low. 4. Cordycepin inhibits RNA polyadenylation only when [14C]ATP is used as a nucleotide donor, and has no visible influence on the activity of the system utilizing [14C]oligo(A)-nucleotides. 5. It seems that RNA in the pea embryo axes is polyadenylated by a two-step mechanism: synthesis of oligo(A)-nucleotides, and their addition to RNA.

12/3,AB/22 (Item 8 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

03553372 78187372
Poly(A) polymerase activity during cell cycle and erythropoietic differentiation in erythroleukemic mouse spleen cells.
Adolf GR; Swetly P
Biochim Biophys Acta (NETHERLANDS) Apr 27 1978, 518 (2) p334-44, ISSN 0006-3002 Journal Code: A0W
Languages: ENGLISH
Document type: JOURNAL ARTICLE

Poly(A) polymerase activity was studied in lysates of cultured murine erythroleukemic cells (Friend cells). Incorporation of ATP into acid-precipitable products is dependendent on the presence of Mn2+ or Mg2+ and of an RNA primer. The reaction is specific for ATP as the substrate (KM=290 290 micron, it is not inhibited by actinomycin D and only slightly interferred with by ethidium bromide. Cordycepin 5'-triphosphate and sodium pyrophosphate inhibit the enzyme activity. The chain length of the products of the reaction is dependent on the primer concentration and reaches up to 30 nucleotides. Poly(A) polymerase activity is low in resting (G1 phase) cells 75 nmol ATP incorporated/h per 10(6) cells) and increases to a level about twice as high in early S phase of the cell cycle. A possible model for regulation of enzyme activity is discussed. Polymerase activity in the early phase of erythropoietic differentiation of the cells induced by butyric acid does not show any difference in comparison to untreated controls. A decrease in enzyme activity to levels characteristic for cells in G1 phase accompanies shutdown of cell growth in the course of the ongoing differentiation. Analysis of the DNA content of the cells revealed

that erythropoietic differentiation of Friend cells induced by butyric acid is characterized by arrest of the cells in G1 phase of the cell cycle. Poly(A) polymerase activity in erythroleukemic cells is thus controlled only by the phase of the cell cycle; it is not affected by changes in gene expression during erythroid differentiation.

12/3,AB/23 (Item 9 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

03255954 77157954
Selective inhibition of initial polyadenylation in isolated nuclei by low levels of cordycepin 5"-triphosphate.
Rose KM; Bell LE; Jacob ST
Biochim Biophys Acta (NETHERLANDS) Apr 4 1977, 475 (3) p548-52, ISSN 0006-3002 Journal Code: A0W
Languages: ENGLISH
Document type: JOURNAL ARTICLE
The effect of cordycepin 5'-triphosphate on poly(A) synthesis was investigated in isolated rat hepatic nuclei. Nuclei were incubated in the absence and presence of exogenous primer in order to distinguish the chromatin-associated poly(A) polymerase from the "free" enzyme (Jacob, S.T., Roe, F.J. and Rose, K.M. (1976) Biochem. J. 153, 733--735). The chromatin-bound enzyme, which adds adenylate residues onto the endogenous RNA, was selectively inhibited at low concentrations of cordycepin 5'-triphosphate, 50% inhibition being achieved at 2microng/ml. At least 80 times more inhibitor was required for 50% reduction in the "free" nuclear poly(A) polymerase activity. Inhibition of DNA-dependent RNA synthesis also required higher concentrations of the nucleotide analogue. These data not only offer a mechanism for the selective inhibition of initial polyadenylation of heterogeneous nuclear RNA in vivo by cordycepin, but also provide a satisfactory explanation for the indiscriminate effect of the inhibitor on partially purified or "free" poly(A) and RNA polymerases.

12/3,AB/24 (Item 10 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

03100993 77002993
Nuclear poly(A) polymerase from rat liver and a hepatoma. Comparison of properties, molecular weights and amino acid compositions.
Rose KM; Jacob ST
Eur J Biochem (GERMANY, WEST) AUG 1 1976, 67 (1) p11-21, ISSN 0014-2956 Journal Code: EMZ
Languages: ENGLISH

Document type: JOURNAL ARTICLE

Poly(A) polymerase was extracted from isolated nuclei of rat liver and a rapidly growing solid tumor (Morris hepatoma 3924A). The enzyme from each tissue was purified by successive chromatography on DEAE-Sephadex, phosphoecllulose, hydroxyapatite and QAE-Sephadex. Purified enzyme from both liver and tumor was essentially homogeneous as judged by polyacrylamide gel electrophoresis. Under nondenaturing conditions, enzyme activity corresponded to visible protein and, upon denaturation, a single polypeptide was detected. The enzymes had absolute requirements for Mn2+ as the divalent ion, ATP as the substrate and an oligonucleotide or polynucleotide as the primer. Both enzymes were inhibited by sodium pyrophosphate, N-ethylmaleimide, Rose Bengal, cordycepin 5'-triphosphate and several rifamycin derivatives. The reactions were unaffected by potassium phosphate, alpha-amanitin and pancreatic ribonuclease. However, the liver and hepatoma enzymes differed from each other with respect to apparent Km, primer saturation levels and sensitivity to pH changes. The most striking differences between the enzymes were in their calculated molecular weights (liver, 48000; hepatoma, 60000) and amino acid compositions. Finally, the level of the hepatoma enzyme relative to that of the liver enzyme was at least 1.5-fold higher when expressed per mg DNA.

12/3,AB/25 (Item 11 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

02933852 76114852

The action of cordycepin on nascent nuclear RNA and poly(A) synthesis in regenerating liver.

Glazer RI

Biochim Biophys Acta (NETHERLANDS) Jan 19 1976, 418 (2) p160-6, ISSN 0006-3002 Journal Code: A0W

Languages: ENGLISH

Document type: JOURNAL ARTICLE

Following a 5 min pulse of [5- 3H]orotic acid via the protal vein, the specific radioactivity of non-poly(A)heterogeneous nuclear RNA (HnRNA) reaches a peak at 12 h after partial hepatectomy. In contrast, poly(A)-HnRNA was maximally elevated only at 2 h after operation. After intraportal injection of cordycepin (3'-deoxyadenosine) 1 min before [5-3H]orotic acid, a dose-dependent inhibition of nuclear HnRNA and rRNA occurred. Fractionation of HnRNA on poly(U)-Sepharose following 20 mg/kg of cordycepin revealed that a 65% reduction occurred in the labeling of poly(A)-HnRNA while non-polyactivity of UTP in control and cordycepin-treated animals indicated no significant alterations in these parameters. Assessment of poly(A) size using poly(A)-HnRNA annealed with oligo(dT)10 as template primer for Escherichia coli DNA polymerase I, showed that 20 mg/kg of cordycepin inhibited nuclear polyadenylylation by

43%; no alteration in the binding of poly(A)-HnRNA to Millipore filters occurred at this dose of cordycepin. These results indicate that cordycepin is a non-selective inhibitor of nuclear RNA and poly(A)synthesis in regenerating rat liver.

12/3,AB/26 (Item 12 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

02910876 76091876
Three distinct forms of nuclear poly(A) polymerase.
Niessing J
Eur J Biochem (GERMANY, WEST) Nov 1 1975, 59 (1) p127-35, ISSN 0014-2956 Journal Code: EMZ
Languages: ENGLISH
Document type: JOURNAL ARTICLE
Poly(A) polymerase activities have been solubilized from rat liver nuclei and purified by chromatography on Bio-Gel A-1.5M, DEAE-Sephadex and CM-cellulose. Three distinct forms of nuclear poly(A) polymerase have been resolved by chromatography on CM-cellulose. According to their sequence of elution from CM-cellulose these enzyme activities have been termed A, B and C. Enzymes A and B are Mn2+ -dependent, enzyme C requires Mg2+. With the same chromatographic step on CM-cellulose the Mn+ -dependent poly(A) polymerase activities were separated from a Mn2+ -dependent enzyme system capable of synthesizing RNA-primed poly(U), poly(G) and poly(C). The effect of different nuclear and cytoplasmic RNA primers on the rate of poly(A) formation suggests enzyme A to be responsible for the elongation of preexisting poly (A) chains. The phosphorylated derivated derivative of cordycepin, 3'-deoxyadenosine 5'-triphosphosphate (3'-dATP), which is known to inhibit nuclear poly(A) synthesis in vivo, also impairs poly(A) formation in vitro. It is shown that 3'-dATP very probably is not incorporated into poly(A)invitro, suggesting that 3'-dATP primarily affects the catalytic activities of the poly(A) polymerase species rather than directly blocking chain elongation.

12/3,AB/27 (Item 13 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

02881621 76062621
A kinetic and structural characterization of adenosine-5'-triphosphate: ribonucleic acid adenylyltransferase from Pseudomonas putida.
Blakesley RW; Boezi JA
Biochim Biophys Acta (NETHERLANDS) Dec 4 1975, 414 (2) p133-45, ISSN 0006-3002 Journal Code: A0W

Languages: ENGLISH
Document type: JOURNAL ARTICLE

A catalytic and structural study of ATP:RNA adenylyltransferase (EC 2.7.7.19) from the particulate fraction of Pseudomonas putida was made. During the large-scale purification of this enzyme, designated adenylyltransferase B, a previously undetected ATP-incorporating activity, designated adenylyltransferase A, was observed. Adenylyltransferases A and B were indistinguishable catalytically; however, they differed in their chromatographic and sedimentation properties. Adenylyltransferases A and B were resolved by phosphocellulose, by poly (U)-Sepharose and by Bio-Gel P-100 chromatographies. Adenylytransferase A was determined to have a sedimentation coefficient (S020,w) of 9.3 S and B of 4.3 S. The molecular weight of adenylyltransferase A was estimated to be 185000 and that of adenylyltransferase B to be 50000-60000. Apparently, adenylyltransferase A was generated from adenylyltransferase B during the purification. The AMP incorporation catalyzed by adenylyltransferases A and B was inhibited by two derivatives of the antibiotic rifamycin, AF/013 (50% at 5 mug/ml) and AF/DNFI (50% at 10 mug/ml). The 5'-triphosphate derivative (3'-dATP) of the drug cordycepin (3'-deoxyadenosine/ was a competitive inhibitor with ATP for both adenylyltransferases. The Ki for 3'-deoxyadenosine 5'-triphosphate was 6 - 10(-4)--10 - 10(-4) M, while the Km for ATP was 1 - 10(-4)--2 - 10(-4) M. Several other anaolgs of ATP, 2'-deoxyadenosine 5' triphosphate, 2'-O-methyl ATP, or the fluorescent 3-beta-D-ribofuranosylimidazo [2,1-i] purien 5'-triphosphate did not affect the activity of adenylyltransferase A or B. Poly(U) and poly(dT) were competitive inhibitors of the ribosomal RNA-primed polymerization reaction. The Ki for poly(U) or poly(dT), in terms of nucleotide phosphate, was 4 - 10-6)--10 - 10(-6) M for adenylyltransferases A and B, compared to 2 - 10(-4)--4 - 10(-4) M for the Km of ribosomal RNA. The inhibition was a result of the competition between the non-priming poly(U), or poly(dT), and ribosomal RNA for the primer binding site on the enzyme.

12/3,AB/28 (Item 1 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

122283870 CA: 122(23)283870g PATENT

Direct molecular cloning of primer extended DNA and the use of alkane diol bridge in the cloning

INVENTOR(AUTHOR): Wallace, Robert Bruce; Witney, Franklin Richard
LOCATION: USA
ASSIGNEE: Bio-Rad Laboratories, Inc.
PATENT: PCT International ; WO 9507347 A1 DATE: 950316
APPLICATION: WO 94US9817 (940901) *US 118387 (930908)
PAGES: 49 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C12N-001/20A; C12P-019/34B DESIGNATED COUNTRIES: CA; JP DESIGNATED REGIONAL: AT; BE; CH

; DE; DK; ES; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE
?

08/480,472

6/28/96

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=> E ALKANE
E#      FILE              FREQUENCY  TERM
--      ----              ---------  ----
E1      USPAT                     1      ALKANDLAMINE/BI
E2      USPAT                     1      ALKANDS/BI
E3      USPAT                 13173 -->  ALKANE/BI
E4      USPAT                     2      ALKANE1/BI
E5      USPAT                     1      ALKANE2/BI
E6      USPAT                     1      ALKANE3/BI
E7      USPAT                     9      ALKANEALDEHYDE/BI
E8      USPAT                     1      ALKANEALKOXIDE/BI
E9      USPAT                    24      ALKANEAMIDE/BI
E10     USPAT                     1      ALKANEAMIDEALKYL/BI
E11     USPAT                     4      ALKANEAMIDES/BI
E12     USPAT                     1      ALKANEAMIDINES/BI
=> MORE
E13     USPAT                    15      ALKANEAMIDO/BI
E14     USPAT                     1      ALKANEAMINE/BI
E15     USPAT                     1      ALKANEAMINO/BI
E16     USPAT                     1      ALKANEAMMONIUM/BI
E17     USPAT                     1      ALKANEANHYDRIDES/BI
E18     USPAT                     2      ALKANEARALKANE/BI
E19     USPAT                     2      ALKANEARYLALKANE/BI
E20     USPAT                     1      ALKANEBENZENESULFONAMIDES/BI
E21     USPAT                     2      ALKANEBENZENESULFONATE/BI
E22     USPAT                     1      ALKANEBIS/BI
E23     USPAT                     1      ALKANEBISCYCLOALKYLENE/BI
E24     USPAT                     2      ALKANEBORONIC/BI
=> MORE
E25     USPAT                     1      ALKANEBREAKDOWN/BI
E26     USPAT                     1      ALKANECABOXYLIC/BI
E27     USPAT                    19      ALKANECARBAMOYL/BI
E28     USPAT                     1      ALKANECARBOAMIDO/BI
E29     USPAT                     4      ALKANECARBONAMIDE/BI
E30     USPAT                     5      ALKANECARBONAMIDES/BI
E31     USPAT                     1      ALKANECARBONAMIDO/BI
E32     USPAT                     1      ALKANECARBONATE/BI
E33     USPAT                     1      ALKANECARBONIC/BI
E34     USPAT                     4      ALKANECARBONITRILES/BI
E35     USPAT                    49      ALKANECARBONYL/BI
E36     USPAT                     3      ALKANECARBONYLAMINO/BI
=> MORE
E37     USPAT                     1      ALKANECARBONYLAMINOSULPHONYL/BI
E38     USPAT                     5      ALKANECARBONYLOXY/BI
E39     USPAT                     2      ALKANECARBONYLOXYALKYL/BI
E40     USPAT                     1      ALKANECARBOXALDEHYDE/BI
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E41	USPAT	13	ALKANECARBOXAMIDE/BI
E42	USPAT	8	ALKANECARBOXAMIDES/BI
E43	USPAT	3	ALKANECARBOXAMIDINOMETHYL/BI
E44	USPAT	3	ALKANECARBOXAMIDO/BI
E45	USPAT	1	ALKANECARBOXAMIDOALKYL/BI
E46	USPAT	3	ALKANECARBOXIMIDIC/BI
E47	USPAT	1	ALKANECARBOXVLIC/BI
E48	USPAT	4	ALKANECARBOXY/BI
=> MORE			
E49	USPAT	1	ALKANECARBOXYAMIDINOMETHYL/BI
E50	USPAT	2	ALKANECARBOXYCLIC/BI
E51	USPAT	1	ALKANECARBOXYL/BI
E52	USPAT	14	ALKANECARBOXYLATE/BI
E53	USPAT	26	ALKANECARBOXYLATES/BI
E54	USPAT	1097	ALKANECARBOXYLIC/BI
E55	USPAT	1	ALKANECARBOXYLLIC/BI
E56	USPAT	1	ALKANECARBOXYLOXY/BI
E57	USPAT	1	ALKANECARBOYXLIC/BI
E58	USPAT	2	ALKANECARBTHIOAMIDE/BI
E59	USPAT	3	ALKANED/BI
E60	USPAT	3	ALKANEDEASPHALTED/BI
=> MORE			
E61	USPAT	1	ALKANEDI/BI
E62	USPAT	7	ALKANEDIAL/BI
E63	USPAT	1	ALKANEDIALDEHYDE/BI
E64	USPAT	1	ALKANEDIALDEHYDES/BI
E65	USPAT	6	ALKANEDIALS/BI
E66	USPAT	3	ALKANEDIAMIDE/BI
E67	USPAT	3	ALKANEDIAMIDES/BI
E68	USPAT	92	ALKANEDIAMINE/BI
E69	USPAT	96	ALKANEDIAMINES/BI
E70	USPAT	9	ALKANEDIAMINO/BI
E71	USPAT	1	ALKANEDIATE/BI
E72	USPAT	2	ALKANEDIAZOHYDROXIDES/BI
=> MORE			
E73	USPAT	1	ALKANEDIBASIC/BI
E74	USPAT	1	ALKANEDICARBIMIDE/BI
E75	USPAT	2	ALKANEDICARBONYL/BI
E76	USPAT	1	ALKANEDICARBOXIC/BI
E77	USPAT	16	ALKANEDICARBOXYLATE/BI
E78	USPAT	7	ALKANEDICARBOXYLATES/BI
E79	USPAT	223	ALKANEDICARBOXYLIC/BI
E80	USPAT	1	ALKANEDICARBOXYLICS/BI
E81	USPAT	1	ALKANEDIENE/BI
E82	USPAT	2	ALKANEDIENES/BI
E83	USPAT	8	ALKANEDIENYL/BI
E84	USPAT	3	ALKANEDIENYLS/BI

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=> MORE
E85     USPAT                1     ALKANEDIETHANOLAMIDE/BI
E86     USPAT                2     ALKANEDIHALIDE/BI
E87     USPAT                6     ALKANEDIHALIDES/BI
E88     USPAT                1     ALKANEDIIMIDE/BI
E89     USPAT                1     ALKANEDIIMIDES/BI
E90     USPAT                1     ALKANEDIIODIDE/BI
E91     USPAT                2     ALKANEDIISOCYANATE/BI
E92     USPAT                1     ALKANEDILY/BI
E93     USPAT                1     ALKANEDIMETHANOL/BI
E94     USPAT                1     ALKANEDIMETHANOLS/BI
E95     USPAT                6     ALKANEDINITRILE/BI
E96     USPAT                8     ALKANEDINITRILES/BI
=> MORE
E97     USPAT                1     ALKANEDINYL/BI
E98     USPAT               21     ALKANEDIOATE/BI
E99     USPAT               40     ALKANEDIOATES/BI
E100    USPAT                6     ALKANEDIOC/BI
E101    USPAT              284     ALKANEDIOIC/BI
E102    USPAT                1     ALKANEDIOICS/BI
E103    USPAT                1     ALKANEDIOIS/BI
E104    USPAT              755     ALKANEDIOL/BI
E105    USPAT                1     ALKANEDIOLACRYLATE/BI
E106    USPAT                5     ALKANEDIOLAMINE/BI
E107    USPAT                1     ALKANEDIOLAMINES/BI
E108    USPAT                1     ALKANEDIOLATES/BI
=> S E104
L1           755 ALKANEDIOL/BI
=> S L1 AND (PRIMER# OR OLIGONUCLEOTIDE# OR PROMOTER# OR PROMOTOR#)
         18198 PRIMER#
          4811 OLIGONUCLEOTIDE#
         23435 PROMOTER#
          3640 PROMOTOR#
L2             98 L1 AND (PRIMER# OR OLIGONUCLEOTIDE# OR PROMOTER# OR PROMOTO
R#)
=> S (DNA OR RNA) (2A) POLYMERASE
         15012 DNA
          7901 RNA
          4846 POLYMERASE
L3          3909 (DNA OR RNA) (2A) POLYMERASE
=> S L2 AND L3
L4             1 L2 AND L3
=> D L4 CIT AB

1.  5,112,963, May 12, 1992, Modified **oligonucleotides**; Uwe Pieles,
et al., 536/25.32; 435/6; 536/23.1, 24.5 [IMAGE AVAILABLE]
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US PAT NO: 5,112,963 [IMAGE AVAILABLE] L4: 1 of 1

ABSTRACT:
The present invention provides modified **oligonucleotides**, wherein, amongst the first four bases on the 5'-end, they have the base sequence AT or TA and, bound to one of the two O.sup.- groups of the 5'-phosphate group of the first nucleotide at the 5'-end of said **oligonucleotide**, they contain a radical of the general formula: ##STR1## in which R.sub.4 is a spacer group and R.sub.1, R.sub.2 and R.sub.3 are hydrogen atoms or alkyl or alkoxy radicals containing up to 3 carbon atoms.
These modified **oligonucleotides** can be used for blocking the replication and/or expression of genes which have a sequence complementary with the modified **oligonucleotides**.

=> S EXTEN? OR POLYMER?

S EXTENSION OR POLYMERASE

1335751 EXTEN?
278998 POLYMER?

L5 1445475 EXTEN? OR POLYMER?
=> D HIS
(FILE 'USPAT' ENTERED AT 14:52:59 ON 28 JUN 96)
E ALKANE
L1 755 S E104
L2 98 S L1 AND (PRIMER# OR OLIGONUCLEOTIDE# OR PROMOTER# OR PROMOTO
L3 3909 S (DNA OR RNA) (2A) POLYMERASE
L4 1 S L2 AND L3
L5 1445475 S EXTEN? OR POLYMER?
=> S L2 (5A) (POLYMERASE OR EXTENSION)
WARNING - PROXIMITY OPERATOR PRECEDENCE LEVEL CONFLICTS OR IS NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'L2 (5A) '
4846 POLYMERASE
237655 EXTENSION
L6 6 L2 (5A) (POLYMERASE OR EXTENSION)
=> D L6 1-6 CIT AB

1. 5,120,785, Jun. 9, 1992, Ethylene vinyl acetate polymers for latex caulks; James L. Walker, et al., 524/423, 425, 436, 445, 446, 448, 449, 451, 555 [IMAGE AVAILABLE]

US PAT NO: 5,120,785 [IMAGE AVAILABLE] L6: 1 of 6

ABSTRACT:
Latex caulk compositions comprising 30 to 80% filler and 20 to 70% by weight of an emulsion polymer prepared for the interpolymerization of 30

to 70 parts by weight of a vinyl ester of an alkanoic acid; 15 to 60 parts of an alkyl (C.sub.2 and C.sub.8) acrylate or dialkyl (C.sub.2 to C.sub.10) maleate; 10 to 30 parts ethylene; 1 to 5 parts olefinically unsaturated carboxylic acid; 0 to 5 parts polyolefinically unsaturated monomer and 0 to 8 parts of a copolymerizable functional monomer containing hydroxyl, amide or methylol substituents, (to total 100 parts by weight).

2. 5,112,963, May 12, 1992, Modified **oligonucleotides**; Uwe Pieles, et al., 536/25.32; 435/6; 536/23.1, 24.5 [IMAGE AVAILABLE]

US PAT NO: 5,112,963 [IMAGE AVAILABLE] L6: 2 of 6

ABSTRACT:
The present invention provides modified **oligonucleotides**, wherein, amongst the first four bases on the 5'-end, they have the base sequence AT or TA and, bound to one of the two O.sup.- groups of the 5'-phosphate group of the first nucleotide at the 5'-end of said **oligonucleotide**, they contain a radical of the general formula: ##STR1## in which R.sub.4 is a spacer group and R.sub.1, R.sub.2 and R.sub.3 are hydrogen atoms or alkyl or alkoxy radicals containing up to 3 carbon atoms.
These modified **oligonucleotides** can be used for blocking the replication and/or expression of genes which have a sequence complementary with the modified **oligonucleotides**.

3. 5,036,113, Jul. 30, 1991, Tire having radiation cured air barrier coating; Wyndham H. Boon, et al., 522/96, 174; 528/66 [IMAGE AVAILABLE]

US PAT NO: 5,036,113 [IMAGE AVAILABLE] L6: 3 of 6

ABSTRACT:
A tire has on its inner surface on elastomeric air barrier coating, which is formed by photocuring a composition comprising: (a) an end capped prepolymer (MW 2500-10,000) formed by reacting a polyester diol (MW750-1500) with a diisocyanate, and reacting the resulting diisocyanate terminated prepolymer with an end group forming compound; (b) one or more monofunctional addition polymerizable monomers; and (c) a photoinitiator or mixture thereof. In preferred embodiments, the polyester diol is hydroxyl terminated ethylene adipate, the diisocyanate is TDI, and the end group forming compound is 2-hydroxyethyl methacrylate (HEMA). The monofunctional monomer may be or include N-vinyl-pyrrolidone (NVP). The air barrier coating has high elongation, low modulus, good heat aging resistance and good adhesion to the tire in addition to low oxygen permeability.

4. 4,874,670, Oct. 17, 1989, Tire having cured photopolymer air barrier coating; Wyndham Boon, et al., 428/423.9; 427/507, 520, 521; 428/424.8,

495, 521 [IMAGE AVAILABLE]

US PAT NO: 4,874,670 [IMAGE AVAILABLE] L6: 4 of 6

ABSTRACT:
A tire has on its inner surface an elastomeric air barrier coating, which is formed by photocuring a compositioin comprising: (a) an end capped prepolymer (MW 2500-10,000) formed by reacting a polyester diol (MW750-1500) with a diisocyanate, and reacting the resulting diisocyanate terminated prepolymer with an end group forming compound; (b) one or more monofunctional addition polymerizable monomers; and (c) a photoinitiator or mixture thereof. In preferred embodiments, the polyester diol is hydroxyl terminated ethylene adipate, the diisocyanate is TDI, and the end group forming compound is 2-hydroxyethyl methacrylane (HEMA). The monofunctional monomer may be or include N-vinyl-pyrrolidone (NVP). The air barrier coating has high elongation, low modulus, good heat aging resistance and good adhesion to the tire in addition to low oxygen permeability.

5. 4,626,578, Dec. 2, 1986, Thermosetting high solids **primer** composition comprising epoxy ester resin and hydroxy-reactive crosslinking agent; Panagiotis I. Kordomenos, et al., 525/484, 510, 514, 528; 528/45 [IMAGE AVAILABLE]

US PAT NO: 4,626,578 [IMAGE AVAILABLE] L6: 5 of 6

ABSTRACT:
Novel solvent-based thermosetting composition comprising (a) hydroxy functional epoxy ester resin of number average molecular weight (Mn) between about 1,000 and about 5,000, comprising the reaction product of diepoxide with aliphatic diol and, subsequently with monobasic fatty acid; and (b) polyfunctional, hydroxy-reactive crosslinking agent, for example, aminoplast crosslinking agent or blocked polyisocyanate crosslinking agent comprising isocyanate groups blocked by reaction with an active hydrogen bearing blocking agent. The coating composition can be formulated as a **primer** composition sprayable with conventional spraying equipment.

6. 4,554,188, Nov. 19, 1985, Chain-extendable crosslinkable urethane modified polyhydroxy oligomers and coating composition comprising same; Joseph W. Holubka, et al., 427/393.5; 524/700, 765; 525/509, 528; 528/45; 560/24, 25, 157, 158 [IMAGE AVAILABLE]

US PAT NO: 4,554,188 [IMAGE AVAILABLE] L6: 6 of 6

ABSTRACT:
High solids, solvent-based resin composition comprises novel

chain-extendable, crosslinkable urethane modified polyhydroxy oligomers, crosslinking agent and, preferably, catalyst(s). The composition cures at elevated temperature to provide a coating on a substrate, such as steel, which is highly resistant to corrosion, humidity and solvents and provides corrosion protection for the substrate. The novel oligomers can be the reaction product of a polyol with a half-blocked diisocyanate, wherein said polyol comprises three or more hydroxy, and the half-blocked diisocyanate comprises the reaction product of an organic diisocyanate with approximately one molar equivalent of a monofunctional blocking agent.

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=> E CORDYCEPIN
E#      FILE            FREQUENCY  TERM
--      ----            ---------  ----
E1      USPAT                2      CORDYAPIN/BI
E2      USPAT                1      CORDYC/BI
E3      USPAT               54  --> CORDYCEPIN/BI
E4      USPAT                3      CORDYCEPINE/BI
E5      USPAT                1      CORDYCEPINTRIPHOSPHATE/BI
E6      USPAT                1      CORDYCEPOSE/BI
E7      USPAT               17      CORDYCEPS/BI
E8      USPAT                1      CORDYCEPTIN/BI
E9      USPAT                1      CORDYEPS/BI
E10     USPAT                1      CORDYLES/BI
E11     USPAT                6      CORDYLINE/BI
E12     USPAT                2      CORDYLITE/BI
=> S E3 OR E4 OR E5
            54 CORDYCEPIN/BI
             3 CORDYCEPINE/BI
             1 CORDYCEPINTRIPHOSPHATE/BI
L7          56 CORDYCEPIN/BI OR CORDYCEPINE/BI OR CORDYCEPINTRIPHOSPHATE/B
I
=> S PRIMER# OR PROMOTER# OR PROMOTOR# OR OLIGONUCLEOTIDE#
         18198 PRIMER#
         23435 PROMOTER#
          3640 PROMOTOR#
          4811 OLIGONUCLEOTIDE#
L8        41198 PRIMER# OR PROMOTER# OR PROMOTOR# OR OLIGONUCLEOTIDE#
=> S L7 AND L8
L9          34 L7 AND L8
=> D L9 1-34 CIT AB
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1. 5,525,497, Jun. 11, 1996, Recombinant poly(A) polymerase; Walter Keller, et al., 435/194, 69.1, 252.33, 320.1; 530/415, 416; 536/23.2 [IMAGE AVAILABLE]

US PAT NO: 5,525,497 [IMAGE AVAILABLE] L9: 1 of 34

ABSTRACT:
Purified nucleic acid encoding a yeast, human, or bovine poly(A) polymerase, where the bovine nucleic acid consists essentially of that nucleic acid sequence shown as nucleotide SEQ. ID. NO.: 1; the resulting recombinant poly(A) polymerase expressed from these nucleic acids, corresponding methods of their production, and methods of use of the poly(A) polymerase.

2. 5,516,663, May 14, 1996, Ligase chain reaction with endonuclease IV correction and contamination control; Keith C. Backman, et al., 435/91.2, 6, 91.1; 436/501; 536/22.1, 23.1, 24.1, 24.3, 24.31, 24.32, 24.33; 935/77, 78 [IMAGE AVAILABLE]

US PAT NO: 5,516,663 [IMAGE AVAILABLE] L9: 2 of 34

ABSTRACT:
The present invention involves methods of improving the Ligase Chain Reaction (LCR.TM.) amplification schemes by modifying at least one probe end so that the probability of the probe contributing to spurious ligation and signal development is greatly reduced. Only after specific hybridization of the modified probe with true target are the modified ends "corrected" by endonuclease IV in a target dependent fashion to allow participation of the probe in the enzymatic ligation reaction. Specific modifications include 3' phosphate blocking groups and nucleic acid overhangs containing an abasic site at the point of ligation. Further embodiments include probes modified to contain ribonucleotide moieties which, after amplification, can be cleaved by RNase to destroy the amplification products and reduce the risk of contamination.

3. 5,508,179, Apr. 16, 1996, Use of deoxyribose nicotinamide adenine dinucleotide to enhance the specificity of NAD.sup.+ -dependent ligation reactions; Robert B. Wallace, et al., 435/91.1, 6, 15, 91.2, 91.52, 810 [IMAGE AVAILABLE]

US PAT NO: 5,508,179 [IMAGE AVAILABLE] L9: 3 of 34

ABSTRACT:
This invention provides methods and compounds relating to the use of deoxyribose nicotinamide adenine dinucleotide (dNAD.sup.+) analogues in NAD.sup.+ -dependent ligation reactions. The compounds and methods may be used in NAD.sup.+ -dependent ligation reactions generally, and to increase the specificity of NAD.sup.+ -dependent ligation reactions.

4. 5,506,212, Apr. 9, 1996, **Oligonucleotides** with substantially chirally pure phosphorothioate linkages; Glenn Hoke, et al., 514/44, 42, 43, 45, 46; 536/24.5, 25.33, 25.34 [IMAGE AVAILABLE]

US PAT NO: 5,506,212 [IMAGE AVAILABLE] L9: 4 of 34

ABSTRACT:
Sequence specific phosphorothioate **oligonucleotides** comprising nucleoside units which are joined together by either substantially all Sp or substantially all Rp phosphorothioate intersugar linkages are provided. Such sequence specific phosphorothioate **oligonucleotides** having substantially chirally pure intersugar linkages are prepared by enzymatic synthesis from nucleoside 5'-O-(1-thiotriphosphates).

5. 5,503,979, Apr. 2, 1996, Method of using replicatable hybridzable recombinant RNA probes; Fred R. Kramer, et al., 435/6, 91.1, 91.2, 91.21, 91.3, 91.32, 91.5, 172.3, 948; 436/501; 536/23.1, 24.1, 24.3, 24.31, 24.32, 24.33; 935/17, 31, 78, 88 [IMAGE AVAILABLE]

US PAT NO: 5,503,979 [IMAGE AVAILABLE] L9: 5 of 34

ABSTRACT:
The present invention provides a replicatable and hybridizable recombinant single-stranded RNA probe molecule comprising: a recognition sequence for the binding of an RNA-directed RNA polymerase; a sequence required for the initiation of product strand synthesis by the polymerase; and a heterologus RNA sequence inserted at a specific site in the internal region of the recombinant molecule and complementary to an oligo or polynucleotide of interest. This invention also provides methods for determining the presence of concentration of an oligo- or polynucleotide of interest in a sample and for simultaneously determining the presence or concentration of several different oligo- or polynucleotides of interest in a sample.

6. 5,487,972, Jan. 30, 1996, Nucleic acid detection by the 5'-3'exonuclease activity of polymerases acting on adjacently hybridized **oligonucleotides**; David H. Gelfand, et al., 435/6, 91.2, 810; 436/501; 536/22.1, 23.1, 24.1, 24.3, 24.31, 24.32, 24.33; 935/77, 78, 88 [IMAGE AVAILABLE]

US PAT NO: 5,487,972 [IMAGE AVAILABLE] L9: 6 of 34

ABSTRACT:
A process of detecting a target nucleic acid using labeled **oligonucleotides** which uses the 5' to 3' nuclease activity of a nucleic acid polymerase to cleave annealed labeled **oligonucleotide** from hybridized duplexes and thus releasing labeled **oligonucleotide** fragments for detection. This process is easily incorporated into a PCR amplification assay.

7. 5,474,929, Dec. 12, 1995, Selectable/reporter gene for use during

genetic engineering of plants and plant cells; Lawrence E. Pelcher, 435/240.4, 69.1, 172.3, 252.3, 320.1 [IMAGE AVAILABLE]

US PAT NO: 5,474,929 [IMAGE AVAILABLE] L9: 7 of 34

ABSTRACT:
Adenosine deaminase gene (ADA gene) is used as a selectable/reporter gene for plant cells and plants. When introduced into plant cells, the ADA gene makes the cells resistant to inhibition by 2-deoxyadenosine or an analog, so transformed cells can be separated from non-transformed cells by culturing a cell mixture in a medium containing 2-deoxyadenosine or an analog in amounts that inhibit normal plant cells. A single vector may be constructed containing an ADA gene from any source (e.g. a mouse ADA gene) and an additional gene-of-interest to be introduced into plant cells. The vector may then be introduced into the cells by such a route as Agrobacterium infection or micro-projectile bombardment. The presence of the ADA gene in successfully transformed plant cells may be confirmed by cultivating the cells in a medium containing 2-deoxyadenosine or an analog in the presence of a material that changes color in the presence of ammonia. Observation of a color change confirms the presence of the gene. DNA constructs containing both ADA genes and foreign genes-of-interest may be constructed, e.g. plasmid pRD360-ADA (ATCC 69459).

8. 5,434,143, Jul. 18, 1995, Pharmaceutical compositions comprising phosphite-borane compounds; Bernard F. Spielvogel, et al., 514/64; 558/72 [IMAGE AVAILABLE]

US PAT NO: 5,434,143 [IMAGE AVAILABLE] L9: 8 of 34

ABSTRACT:
The phosphite-borane compounds of the present invention correspond to the formula ##STR1## where R.sub.1 is independently selected from H, C.sub.1 -C.sub.20 alkyl, alkylaryl, aryl, trialkylsilyl, with the proviso that both R.sub.1 groups cannot simultaneously be H.sub.1, and
R.sub.2 is selected from H, a monovalent cation such as Li.sup.+, Na.sup.+, K.sup.+, NH.sub.4.sup.+, N(R.sub.3.sup.+).sub.4, where R.sub.3 is independently selected from H, C.sub.1 -C.sub.20 alkyl. The phosphite-borane compounds of the present invention are bioactive in character, variously exhibiting anti-tumor, anti-inflammatory, and hypolipidemic activity. Also disclosed are various synthetic methods for making such phosphite-borane compounds, and for formulating same in unit dosage forms as well as other pharmaceutically and pharmacologically acceptable formulations.

9. 5,428,163, Jun. 27, 1995, Prodrugs for selective drug delivery; Randell L. Mills, 544/232 [IMAGE AVAILABLE]

US PAT NO: 5,428,163 [IMAGE AVAILABLE] L9: 9 of 34

ABSTRACT:
A broad class of pharmaceutical agents which react directly with electron carriers or with reactive species produced by electron transport to release a pharmacologically active molecule to effect a therapeutic functional change in the organism by a receptor or nonrecepter mediated action.

10. 5,418,149, May 23, 1995, Reduction of non-specific amplification glycosylase using DUTP and DNA uracil; David H. Gelfand, et al., 435/91.2, 6 [IMAGE AVAILABLE]

US PAT NO: 5,418,149 [IMAGE AVAILABLE] L9: 10 of 34

ABSTRACT:

Improved methods for amplifying nucleic acids can reduce non-specific amplification and minimize the effects of contamination of nucleic acid amplification reaction assays due to amplified product from previous amplifications. The methods involve the introduction of unconventional nucleotide bags into the amplification reaction products and treating the products by enzymatic (e.g., glycosylases) and/or physical-chemical means to render the product incapable of acting as a template for subsequent amplifications.

11. 5,260,427, Nov. 9, 1993, Nucleosidylphosphite-borane compounds and method of making the same; Bernard F. Spielvogel, et al., 536/17.1; 435/91.5; 558/72; 562/11 [IMAGE AVAILABLE]

US PAT NO: 5,260,427 [IMAGE AVAILABLE] L9: 11 of 34

ABSTRACT:
Nucleosidyl phosphite-borane compounds of the formula: ##STR1## wherein: Nucleoside is a natural or synthetic nucleoside connected to the phosphorus atom via a hydroxyl oxygen; each X is independently selected from O and BHR.sub.3 R.sub.4 ;R.sub.1 is selected from H, alkyl, aryl, alkyaryl, monovalent metal ions, and ammonium cation; R.sub.2 is selected from OR.sub.1 and N(R.sub.5).sub.2, wherein R.sub.5 is independently selected from H, C.sub.1 -C.sub.10 linear or branched alkyl or aryl; R.sub.3 is selected from H, CN, COOH, carboxyl salts, COOR.sub.6 and CONHR.sub.6, wherein R.sub.6 is selected from H, C.sub.1 -C.sub.10 alkyl, alkylaryl and aryl; R.sub.4 is selected from H and C.sub.1 -C.sub.10 alky; and n is 1 to 2.

12. 5,213,972, May 25, 1993, Fermentation process for the production of

pyrimidine deoxyribonucleosides; Russell J. McCandliss, et al., 435/89, 172.3, 252.3, 252.33, 320.1; 536/23.2; 935/14, 60, 68, 72, 73 [IMAGE AVAILABLE]

US PAT NO: 5,213,972 [IMAGE AVAILABLE] L9: 12 of 34

ABSTRACT:
DNA coding for at least one enzyme that causes the accumulation of a pyrimidine deoxyribonucleoside is used, in conjunction with metabolic mutations or heterologous DNA coding for metabolic enzymes that also increase pyrimidine deoxyribonucleoside production, to engineer cultured cells to express a pyrimidine deoxyribonucleoside (PdN) in recoverable quantities, providing a commercially useful fermentation source for PdNs.

13. 5,210,015, May 11, 1993, Homogeneous assay system using the nuclease activity of a nucleic acid polymerase; David H. Gelfand, et al., 435/6, 18, 91.2, 196, 805; 436/63, 501, 815; 536/24.3; 935/17, 77, 78, 88 [IMAGE AVAILABLE]

US PAT NO: 5,210,015 [IMAGE AVAILABLE] L9: 13 of 34

ABSTRACT:
The present invention is directed to a process of detecting a target nucleic acid using labeled **oligonucleotides**. This process uses the 5' to 3' nuclease activity of a nucleic acid polymerase to cleave annealed labeled **oligonucleotide** from hybridized duplexes and release labeled **oligonucleotide** fragments for detection. This process is easily incorporated into a PCR amplification assay.

14. 5,194,370, Mar. 16, 1993, **Promoter** ligation activated transcription amplification of nucleic acid sequences; Mark S. Berninger, et al., 435/6, 91.21; 436/94, 501; 935/77, 78 [IMAGE AVAILABLE]

US PAT NO: 5,194,370 [IMAGE AVAILABLE] L9: 14 of 34

ABSTRACT:
This invention discloses a scheme for producing nucleic acid end products that are functionally or exactly identical to the starting products, thereby resulting in exponential amplification of a desired nucleic acid sequence. Specifically, sequences are cycled between RNA and DNA forms using the following basic steps: (1) a T7 RNA polymerase **promoter** is ligated onto a single-stranded DNA template; (2) T7 RNA polymerase makes many copies of RNA: (3) a complementary DNA is made from the RNA by extension of a **primer** by reverse transcriptase; and (4) the RNA template is removed by ribonuclease H. This amplification method is useful for purposes such as genetic research and diagnostic assays.

15. 5,169,766, Dec. 8, 1992, Amplification of nucleic acid molecules; David M. Schuster, et al., 435/91.2, 6, 91.21, 193, 194 [IMAGE AVAILABLE]

US PAT NO: 5,169,766 [IMAGE AVAILABLE] L9: 15 of 34

ABSTRACT:
A method for amplifying a nucleic acid molecule which employs a proto-**promoter**-containing nucleic acid molecule having a blocked 3' terminus. The invention also includes kits containing reagents for conducting the method.

16. 5,102,802, Apr. 7, 1992, Gene coding for a protein having T3 polymerase activity; William T. McAllister, 435/252.33, 252.3, 252.31, 252.35, 254.2, 254.21, 254.4, 320.1, 940; 536/23.2 [IMAGE AVAILABLE]

US PAT NO: 5,102,802 [IMAGE AVAILABLE] L9: 16 of 34

ABSTRACT:
A cloned DNA sequence encoding T3 RNA polymerase is provided. This DNA can be inserted into an expression vector for recombinant expression of the peptide. The peptide can be used with dual **promotor** vectors containing T3 specific **promoters**.

17. 5,037,745, Aug. 6, 1991, Plasmid for the overproduction of bacteriophage T3 RNA polymerase, transcription vectors that carry a **promoter** recognized by its polymerase, gene coding for T3 RNA polymerase and application of these plasmids; William T. McAllister, 435/91.3, 6, 172.3, 194, 235.1, 320.1; 935/17, 31 [IMAGE AVAILABLE]

US PAT NO: 5,037,745 [IMAGE AVAILABLE] L9: 17 of 34

ABSTRACT:
A dual phage RNA polymerase **promoter** having a polylinker with at opposite ends, a T3 phage RNA polymerase **promoter** and a phage RNA polymerase **promoter**, like T7; the **promoters** are linked to the polylinker in opposite orientation. A recombinant DNA vector containing a T3 phage RNA polymerase **promoter** and a different phage RNA polymerase **promoter**; the **promoters** are linked to a polylinker sequence in opposite orientation. A kit including a T3 **promoter** and containing appropriate components for synthesizing RNA transcripts that are complementary to either strands of a cloned DNA sequence, and for other applications. Gene coding for T3 RNA polymerase, a vector containing the gene and transformed microorganisms.

18. 5,026,651, Jun. 25, 1991, Methods and compositions for the production of human transferrin; Barbara H. Bowman, et al., 435/320.1, 69.1, 71.1, 91.41, 91.51, 172.3, 252.33, 317.1; 536/23.5, 24.3 [IMAGE

AVAILABLE]

US PAT NO: 5,026,651 [IMAGE AVAILABLE] L9: 18 of 34

ABSTRACT:
The present invention discloses the isolation and nucleic acid sequence of a cDNA recombinant plasmid insert which contains the entire coding sequence for the human transferrin protein. The predicted amino acid sequence of human transferrin is disclosed as well. The cDNA-bearing recombinant plasmid was selected from a human recombinant clone bank constructed in the plasmid pKT218, a derivative of pBR322. Also disclosed are proposed methods and compositions for constructing a recombinant expression vector whereby one may obtain expression of the recombinant human transferrin protein.

19. 4,994,371, Feb. 19, 1991, DNA preparation of Christmas factor and use of DNA sequences; Earl W. Davie, et al., 435/6, 91.41, 91.51, 172.3, 243, 320.1; 436/501, 504; 536/23.5, 24.31, 25.32; 935/1, 2, 6, 8, 9, 11, 12, 23, 29, 56, 62, 78, 80, 81 [IMAGE AVAILABLE]

US PAT NO: 4,994,371 [IMAGE AVAILABLE] L9: 19 of 34

ABSTRACT:
There is disclosed an isolated DNA sequence and the amino acid sequence for human factor IX. The isolated DNA sequence and its flanking sequences are useful for determining mutations, deletions or other modifications in genetic sequences expressing normal factor IX or modifications thereof.

20. 4,981,957, Jan. 1, 1991, **Oligonucleotides** with modified phosphate and modified carbohydrate moieties at the respective chain termini; Bernard Lebleu, et al., 536/25.2, 25.5, 26.21, 26.23, 26.26 [IMAGE AVAILABLE]

US PAT NO: 4,981,957 [IMAGE AVAILABLE] L9: 20 of 34

ABSTRACT:
The invention relates to novel **oligonucleotides**, the process for their preparation and their biological uses as mediators of the action of interferon. The **oligonucleotides** according to the invention have the formula: ##STR1## in which Y and T are identical or different and represent particularly O, S, Z and W are identical or different and represent particularly O, S, one at least of the elements Y and Z being different from oxygen, X represents particularly --CHOHCH.sub.2 OH, .SIGMA. is a whole number equal to or greater than 2, A represents adenine or one of its derivatives. These **oligonucleotides** have antiviral use.

21. 4,859,768, Aug. 22, 1989, Derivatives of 2', 5'-oligoadenylate and antiviral uses thereof; Robert J. Suhadolnik, et al., 536/25.2, 26.21, 26.26 [IMAGE AVAILABLE]

US PAT NO: 4,859,768 [IMAGE AVAILABLE] L9: 21 of 34

ABSTRACT:
Synthetic analogs of 2',5'-oligoadenylate wherein the aglycon, ribosyl moiety and/or terminal nucleoside have been modified are effective antiviral agents for pharmaceutical and agricultural use. They are particularly useful in inhibiting replication of tobacco mosaic virus. Novel synthetic analogs have the following formulae wherein m=0, 1, 2 and 3 and n=0, 1, 2, 3 or 4: ##STR1##

The invention described herein was supported by National Institutes of Health Grant GM-26134 and National Science Foundation Grant PCM-8111752.

22. 4,786,600, Nov. 22, 1988, Autocatalytic replication of recombinant RNA; Fred R. Kramer, et al., 435/320.1, 6, 91.3, 172.3; 536/23.1, 24.1, 24.3, 25.1, 25.32; 935/2, 16, 20 [IMAGE AVAILABLE]

US PAT NO: 4,786,600 [IMAGE AVAILABLE] L9: 22 of 34

ABSTRACT:
This invention concerns recombinant RNA molecules comprising a recognition sequence for the binding of an RNA-directed RNA polymerase, a sequence for the initiation of product strand synthesis and a heterologous sequence of interest inserted at a specific site in the internal region of the recombinant molecule. Such recombinant RNA molecules are capable of serving as a template for the synthesis of complementary single-stranded molecules by RNA-directed RNA polymerase. The product molecules so formed are also capable of serving as a template for the synthesis of additional copies of the original recombinant RNA molecule. In a preferred embodiment of the invention Q.beta. replicase is used as the RNA-directed RNA polymerase.

23. 4,767,713, Aug. 30, 1988, Pure culture of Brevibacterium acetylicum AT-6-7, ATCC 39311; Tetsuro Fujishima, et al., 435/252.1, 194, 840 [IMAGE AVAILABLE]

US PAT NO: 4,767,713 [IMAGE AVAILABLE] L9: 23 of 34

ABSTRACT:
The invention is directed to a microbially pure culture of Brevibacterium acetylicum AT-6-7, ATCC 39311 or a mutant thereof which has nucleoside phosphorylase activity.

24. 4,767,709, Aug. 30, 1988, Growth-related hormones; Daniel Nathans, et al., 435/240.2, 172.3, 320.1; 530/399; 536/23.5, 23.51; 930/10, 120, 300; 935/13, 27, 31, 32, 70 [IMAGE AVAILABLE]

US PAT NO: 4,767,709 [IMAGE AVAILABLE] L9: 24 of 34

ABSTRACT:
Proliferin, a growth-related hormone of the prolactin-growth hormone family is provided, as well as DNA molecules encoding proliferin and methods of expressing the DNA molecules in vivo. Methods of probing for proliferin encoding DNA are also provided.

25. 4,708,935, Nov. 24, 1987, (2-5')-Oligo (3'-deoxyadenylate) and derivatives thereof; Robert J. Suhadolnik, et al., 435/91.5, 90, 194 [IMAGE AVAILABLE]

US PAT NO: 4,708,935 [IMAGE AVAILABLE] L9: 25 of 34

ABSTRACT:
3'-deoxyadenosine 5'-triphosphate is oligomerized to form (2'-5')-oligo (3'-deoxyadenylate) by incubation with adenosine triphosphate: (2'-5')-oligo adenosine adenyl transferase, in the presence of an inert support carrying a double straded polynucleotide. The (2'-5')-oligo (3'-deoxyadenylate) is digested with a suitable phosphatase to remove the terminal phosphate groups. The thus produced corresponding 3'-deoxyadenosine compound is an anti-viral material effective against Herpes Simplex infection and effective in inhibiting the transformation of cells infected with Epstein Barr virus.

26. 4,666,837, May 19, 1987, DNA sequences, recombinant DNA molecules and processes for producing the A and B subunits of cholera toxin and preparations containing so-obtained subunit or subunits; Nigel Harford, et al., 435/69.3, 69.1, 91.41, 172.3, 243, 252.3, 252.33, 320.1, 849, 909; 436/6, 34, 71; 536/23.1, 23.2, 23.7; 935/11, 12, 29, 72, 73 [IMAGE AVAILABLE]

US PAT NO: 4,666,837 [IMAGE AVAILABLE] L9: 26 of 34

ABSTRACT:
DNA sequences and recombinant DNA molecules comprising at least a portion coding for all or part of subunits A and/or B of cholera toxin are prepared by enzymatic digestion of DNA of V. cholerae strains, isolating specific fragments and inserting them in appropriate vectors and subunits A and/or B of cholera toxin are prepared by culture of microorganisms containing said modified vectors.

27. 4,654,326, Mar. 31, 1987, Inhibition of plant viruses with **oligonucleotides**; Yair Devash, 514/47, 48, 49; 536/25.2, 26.26 [IMAGE AVAILABLE]

US PAT NO: 4,654,326 [IMAGE AVAILABLE] L9: 27 of 34

ABSTRACT:
Viral diseases in plant parts, such as leaves are inhibited by applying to the plants an effective amount of an agent comprising 2', 5'-**oligonucleotide**, such as 2, 5-A, linked in 2', 5'-phosphodiester bond. The agent is provided in a vehicle such as a liquid or a powder, and is present in the vehicle in an effective amount at a concentration less than 1.times.10.sup.-8 M.

28. 4,594,321, Jun. 10, 1986, Process for producing 3-deoxyguanosine; Tetsuro Fujishima, et al., 435/89, 87, 88, 194, 824, 840, 874; 544/244, 276 [IMAGE AVAILABLE]

US PAT NO: 4,594,321 [IMAGE AVAILABLE] L9: 28 of 34

ABSTRACT:
Glycosylation or transglycosylation of a specified guanine derivative, namely 9-substituted or non-substituted guanine of formula [I] with a 3-deoxyribose donor such as 3'-deoxyadenosine in the presence of a nucleoside phosphorylase source such as of microorganism origin is disclosed.

29. 4,594,320, Jun. 10, 1986, Process for producing 3-deoxyguanosine; Tetsuro Fujishima, 435/89; 544/244, 276 [IMAGE AVAILABLE]

US PAT NO: 4,594,320 [IMAGE AVAILABLE] L9: 29 of 34

ABSTRACT:
Glycosylation or transglycosylation of a specified guanine derivative, namely 9-substituted or non-substituted guanine of formula [I] with a 3-deoxyribose donor such as 3'-deoxyadenosine in the presence of a nucleoside phosphorylase source such as of microorganism origin is disclosed. The nucleoside phosphorylase source is specified.

30. 4,591,564, May 27, 1986, Transferase enzymes which modify the 3'-termini of ribonucleic acid and methods; Kenneth F. Watson, 435/194, 6, 91.3 [IMAGE AVAILABLE]

US PAT NO: 4,591,564 [IMAGE AVAILABLE] L9: 30 of 34

ABSTRACT:
Three ribonucleotidyl terminal transferase enzymes are disclosed which

modify the 3'-termini of ribonucleic acid (RNA) molecules by the addition of ribonucleotide units using ribonucleoside triphosphates as substrates. These terminal transferase activities are distinguishable by the specific ribonucleotide (e.g. AMP, CMP, or UMP) transferred to the 3'-hydroxyl terminus of an RNA **primer**. Also provided is a method for the 3'-terminal modification of RNA molecules by these enzymes and sequencing of RNA from its 3'-termini. The methods provide a convenient and efficient procedure for 3'-terminal modification (homopolymer tailing) of RNA required for synthesis of complete complementary DNA (cDNA) copies or double-stranded DNA gene copies by retrovirus-associated reverse transcriptase. Using the enzymes of the invention, RNA can also be radiolabelled to very high levels for molecular hybridization.

31. 4,555,486, Nov. 26, 1985, Method for using an amino-terminus DNA sequence to synthesize a specific double-stranded DNA; Chander P. Bahl, et al., 435/91.51, 69.1, 69.4, 91.5, 172.3, 320.1; 536/23.1, 24.33; 935/16, 17, 18 [IMAGE AVAILABLE]

US PAT NO: 4,555,486 [IMAGE AVAILABLE] L9: 31 of 34

ABSTRACT:
A method is described for constructing double-stranded DNA using messenger RNA templates. DNA strands complementary to the templates are formed using a non-specific 3' hydroxy terminus **primer**. After separation, the DNA single strands are disabled from self priming by blocking the free 3' hydroxy. **Primer** segments are then provided complementary to a portion of the amino terminus-coding end of the desired single strands. These **primer** segments are then extended with a suitable polymerase to complete the complementary strands.

32. 4,539,313, Sep. 3, 1985, (2'-5')-Oligo (3'-deoxyandenylate) and derivatives thereof; Robert J. Suhadolnik, et al., 514/47 [IMAGE AVAILABLE]

US PAT NO: 4,539,313 [IMAGE AVAILABLE] L9: 32 of 34

ABSTRACT:
3'-deoxyadenosine 5'-triphosphate is oligomerized to form (2'-5')-oligo (3'-deoxyadenylate) by incubation with adenosine triphosphate: (2'-5')-oligo adenosine adenyl transferase, in the presence of an inert support carrying a double stranded polynucleotide. The (2'-5')-oligo (3'-deoxyadenylate) is digested with a suitable phosphatase to remove the terminal phosphate groups. The thus produced corresponding 3'-deoxyadenosine compound is an anti-viral material effective against Herpes simplex infection and effective in inhibiting the transformation of cells infected with Epstein Barr virus.

33. 4,515,781, May 7, 1985, 2',5'-Riboadenylate-morpholinoadenylate nucleotides; Paul F. Torrence, et al., 514/44, 47, 48; 536/25.2, 26.21, 26.26 [IMAGE AVAILABLE]

US PAT NO: 4,515,781 [IMAGE AVAILABLE] L9: 33 of 34

ABSTRACT:
Novel nucleotide compounds are afforded, having at least one 2',5'-riboadenylate unit and a terminal morpholinoadenylate unit. These compounds have potentiated biological activity in the 2,5-A system and increased resistance to degradation.

34. 4,464,359, Aug. 7, 1984, (2'-5')-Oligo (3'-deoxyadenylate) and derivatives thereof; Robert J. Suhadolnik, et al., 514/47, 44; 536/25.2, 25.5, 25.6 [IMAGE AVAILABLE]

US PAT NO: 4,464,359 [IMAGE AVAILABLE] L9: 34 of 34

ABSTRACT:
3'-Deoxyadenosine 5'-triphosphate is oligomerized to form (2'-5')-oligo (3'-deoxyadenylate) by incubation with adenosine triphosphate: (2'-5')-oligo adenosine adenyl transferase, in the presence of an inert support carrying a double stranded polynucleotide. The (2'-5')-oligo (3'-deoxyadenylate) is digested with a suitable phosphatase to remove the terminal phosphate groups. The thus produced corresponding 3'-deoxyadenosine compound is an anti-viral material effective against Herpes Simplex infection and effective in inhibiting the transformation of cells infected with Epstein Barr virus.
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08/480,472

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  123049238    CA: 123(5)49238f    PATENT
  Nucleic acid probes to Mycobacterium avium complex
  INVENTOR(AUTHOR): Hammond, Philip W.
  LOCATION: USA
  ASSIGNEE: Gen-Probe Incorp.
  PATENT: PCT International ; WO 9506755 A1  DATE: 950309
  APPLICATION: WO 94US9902 (940901) *US 116984 (930903)
  PAGES: 44 pp.  CODEN: PIXXD2  LANGUAGE: English  CLASS: C12Q-001/68A
  DESIGNATED COUNTRIES: AU; CA; JP; KR


 2/3,AB/2     (Item 2 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)
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  123027192    CA: 123(3)27192j    PATENT
  Nucleic acid probes for Ureaplasma
  INVENTOR(AUTHOR): Hogan, James J.; Mcallister, Diane L.; Gordon, Patricia
; Hammond, Philip W.
  LOCATION: USA
  ASSIGNEE: Gen-Probe Incorp.
  PATENT: European Pat. Appl. ; EP 639649 A2  DATE: 950222
  APPLICATION: EP 94306083 (940818) *US 109037 (930818)
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PAGES: 81 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C12Q-001/68A
DESIGNATED COUNTRIES: AT; BE; CH; DE; DK; ES; FR; GB; IT; LI; LU; NL; SE

2/3,AB/3 (Item 3 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

121051471 CA: 121(5)51471d PATENT
Nucleic acid process probes for detection of Mycobacterium tuberculosis
INVENTOR(AUTHOR): Hammond, Philip W.
LOCATION: USA
ASSIGNEE: Gen-Probe Inc.
PATENT: PCT International ; WO 9322330 A1 DATE: 931111
APPLICATION: WO 93US3847 (930423) *US 876283 (920428)
PAGES: 22 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C07H-021/02A; C12P-019/34B; C12Q-001/68B DESIGNATED COUNTRIES: AU; CA; JP; KR

2/3,AB/4 (Item 4 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

120317332 CA: 120(25)317332j PATENT
Ribosomal rRNA-derived nucleic acid probes for specific detection of Chlamydia pneumoniae
INVENTOR(AUTHOR): Hammond, Philip W.; Endozo, Anthony
LOCATION: USA
ASSIGNEE: Gen-Probe Inc.
PATENT: PCT International ; WO 9404549 A1 DATE: 940303
APPLICATION: WO 93US7497 (930810) *US 936533 (920826)
PAGES: 30 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C07H-021/02A; C07H-021/04B; C12Q-001/70B DESIGNATED COUNTRIES: AU; CA; JP; KR

2/3,AB/5 (Item 5 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

120263055 CA: 120(21)263055a PATENT
Nucleic acid sequence amplification without temperature cycling
INVENTOR(AUTHOR): Mcdonough, Sherrol H.; Kacian, Daniel L.; Dattagupta, Nanibhushan; Mcallister, Diane L.; Hammond, Philip W.; Ryder, Thomas B.
LOCATION: USA
ASSIGNEE: Gen-Probe Incorp.
PATENT: PCT International ; WO 9403472 A1 DATE: 940217
APPLICATION: WO 93US7138 (930728) *US 925405 (920804)

PAGES: 48 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C07H-021/04A; C12P-019/34B; C12Q-001/68B DESIGNATED COUNTRIES: AU; CA; JP; KR; NO

2/3,AB/6 (Item 6 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

119219167 CA: 119(21)219167u PATENT
Nucleic acid probes for Streptococcus pyogenes
INVENTOR(AUTHOR): Milliman, Curt L.; Hammond, Philip W.
LOCATION: USA
ASSIGNEE: Gen-Probe Inc.
PATENT: United States ; US 5232831 A DATE: 930803
APPLICATION: US 720586 (910628)
PAGES: 9 pp. CODEN: USXXAM LANGUAGE: English CLASS: 435006000; C07H-021/04A; C12Q-001/68B

2/3,AB/7 (Item 7 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

119110555 CA: 119(11)110555t PATENT
Nucleic acid hybridization probes to Mycobacterium gordonae
INVENTOR(AUTHOR): Hogan, James J.; Hammond, Philip W.
LOCATION: USA
ASSIGNEE: Gen-Probe Products Co.
PATENT: United States ; US 5216143 A DATE: 930601
APPLICATION: US 720585 (910628)
PAGES: 9 pp. CODEN: USXXAM LANGUAGE: English CLASS: 536024320; C07H-015/12A; C12Q-001/68B; C12P-019/34B; C12N-001/00B

2/3,AB/8 (Item 8 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

114224790 CA: 114(23)224790t JOURNAL
Nucleophilic addition to the 9 position of 9-phenylcarboxylate-10-methylacridinium protects against hydrolysis of the ester
AUTHOR(S): Hammond, Philip W.; Wiese, Wendy A.; Waldrop, Alex A., III; Nelson, Norman C.; Arnold, Lyle J., Jr.
LOCATION: Gen-Probe Inc., San Diego, CA, 92121, USA
JOURNAL: J. Biolumin. Chemilumin. DATE: 1991 VOLUME: 6 NUMBER: 1
PAGES: 35-43 CODEN: JBCHE7 ISSN: 0884-3996 LANGUAGE: English

2/3,AB/9 (Item 9 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

113111982 CA: 113(13)111982t PATENT
Protected chemiluminescent labels
INVENTOR(AUTHOR): Arnold, Lyle John; Waldrop, Alexander Atkinson, III; Hammond, Philip W.
LOCATION: USA
ASSIGNEE: Gen-Probe, Inc.
PATENT: European Pat. Appl. ; EP 330433 A2 DATE: 890830
APPLICATION: EP 89301679 (890222) *US 160611 (880226)
PAGES: 21 pp. CODEN: EPXXDW LANGUAGE: English CLASS: G01N-033/532A; G01N-033/58B DESIGNATED COUNTRIES: AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; LU; NL; SE

2/3,AB/10 (Item 10 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

111228211 CA: 111(25)228211r JOURNAL
Assay formats involving acridinium-ester-labeled DNA probes
AUTHOR(S): Arnold, Lyle J., Jr.; Hammond, Philip W.; Wiese, Wendy A.; Nelson, Norman C.
LOCATION: Gen-Probe, Inc., San Diego, CA, 92121, USA
JOURNAL: Clin. Chem. (Winston-Salem, N. C.) DATE: 1989 VOLUME: 35
NUMBER: 8 PAGES: 1588-94 CODEN: CLCHAU ISSN: 0009-9147 LANGUAGE: English
?E AU=RYDER, T

Ref	Items	Index-term
E1	7	AU=RYDER, STUART D.
E2	2	AU=RYDER, SUSAN
E3	0	*AU=RYDER, T
E4	3	AU=RYDER, T.
E5	16	AU=RYDER, T. A.
E6	5	AU=RYDER, T. B.
E7	4	AU=RYDER, T.A.
E8	4	AU=RYDER, T.B.
E9	1	AU=RYDER, T.J.
E10	5	AU=RYDER, THOMAS
E11	14	AU=RYDER, THOMAS B.
E12	1	AU=RYDER, THOMAS BRENDAN

Enter P or PAGE for more
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Ref	Items	Index-term
E13	2	AU=RYDER, TIM
E14	1	AU=RYDER, TIM A.
E15	4	AU=RYDER, TIMOTHY A.
E16	1	AU=RYDER, TOM
E17	8	AU=RYDER, U.
E18	10	AU=RYDER, URSULA
E19	1	AU=RYDER, W D J
E20	2	AU=RYDER, W.
E21	12	AU=RYDER, W. A.
E22	5	AU=RYDER, W. ALAN
E23	2	AU=RYDER, W. ALLEN
E24	1	AU=RYDER, W. D. J.

Enter P or PAGE for more
?S E11 OR E12

	14	AU=RYDER, THOMAS B.
	1	AU=RYDER, THOMAS BRENDAN
S3	15	AU="RYDER, THOMAS B." OR AU="RYDER, THOMAS BRENDAN"

?RD

>>>Duplicate detection is not supported for File 342.
>>>Duplicate detection is not supported for File 348.

>>>Records from unsupported files will be retained in the RD set.
...completed examining records
S4 15 RD (unique items)
?T S4/3,AB/1-15

>>>No matching display code(s) found in file(s): 342, 399

4/3,AB/1 (Item 1 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

123027193 CA: 123(3)27193k PATENT
Enhancement of nucleic acid amplification method employing DNA polymerase and RNA polymerase at constant temperature
INVENTOR(AUTHOR): Ryder, Thomas B.; Billyard, Elizabeth R.; Dattagupta, Nanibhushan
LOCATION: USA

ASSIGNEE: Gen-Probe Incorp.
PATENT: PCT International ; WO 9503430 A1 DATE: 950202
APPLICATION: WO 94US8307 (940720) *US 97262 (930723)
PAGES: 51 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C12Q-001/68A
DESIGNATED COUNTRIES: AU; CA; JP; KR

4/3,AB/2 (Item 2 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)
(c) 1996 American Chemical Society. All rts. reserv.

122002776 CA: 122(1)2776u PATENT
Probes and primers for detection of human immunodeficiency virus type 1 in biological samples
INVENTOR(AUTHOR): McDonough, Sherrol H.; Ryder, Thomas B.; Yang, Yeasing
LOCATION: USA
ASSIGNEE: Gen-Probe Incorp.
PATENT: European Pat. Appl. ; EP 617132 A2 DATE: 940928
APPLICATION: EP 94302196 (940328) *US 40745 (930326)
PAGES: 69 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C12Q-001/70A; C12Q-001/68B DESIGNATED COUNTRIES: AT; BE; CH; DE; DK; ES; FR; GB; IT; LI; NL; SE

4/3,AB/3 (Item 3 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)
(c) 1996 American Chemical Society. All rts. reserv.

120263055 CA: 120(21)263055a PATENT
Nucleic acid sequence amplification without temperature cycling
INVENTOR(AUTHOR): Mcdonough, Sherrol H.; Kacian, Daniel L.; Dattagupta, Nanibhushan; Mcallister, Diane L.; Hammond, Philip W.; Ryder, Thomas B.
LOCATION: USA
ASSIGNEE: Gen-Probe Incorp.
PATENT: PCT International ; WO 9403472 A1 DATE: 940217
APPLICATION: WO 93US7138 (930728) *US 925405 (920804)
PAGES: 48 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C07H-021/04A; C12P-019/34B; C12Q-001/68B DESIGNATED COUNTRIES: AU; CA; JP; KR; NO

4/3,AB/4 (Item 4 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)
(c) 1996 American Chemical Society. All rts. reserv.

120101272 CA: 120(9)101272s PATENT
Preparation of nucleic acid from mononuclear cells
INVENTOR(AUTHOR): Ryder, Thomas B.; Kacian, Daniel Louis

LOCATION: USA
ASSIGNEE: Gen-Probe Inc.
PATENT: European Pat. Appl. ; EP 574227 A2 DATE: 931215
APPLICATION: EP 93304440 (930608) *US 895587 (920608)
PAGES: 16 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C12Q-001/68A; C12Q-001/70B DESIGNATED COUNTRIES: AT; BE; CH; DE; DK; ES; FR; GB; IT; LI; LU; NL; SE

4/3,AB/5 (Item 5 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

120049576 CA: 120(5)49576c PATENT
Preparation of nucleic acid from white blood cells
INVENTOR(AUTHOR): Ryder, Thomas B.; Kacian, Daniel Louis
LOCATION: USA
ASSIGNEE: Gen-Probe Inc.
PATENT: European Pat. Appl. ; EP 574267 A2 DATE: 931215
APPLICATION: EP 93304542 (930611) *US 898785 (920612)
PAGES: 17 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C12Q-001/68A
DESIGNATED COUNTRIES: AT; BE; CH; DE; DK; ES; FR; GB; IT; LI; LU; NL; SE

4/3,AB/6 (Item 6 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

115131045 CA: 115(13)131045j JOURNAL
Rapid and quantitative detection of enzymically amplified HIV-1 DNA using chemiluminescent oligonucleotide probes
AUTHOR(S): Ou, Chin Yih; McDonough, Sherrol H.; Cabanas, Debra; Ryder, Thomas B.; Harper, Mary; Moore, Jennifer; Schochetman, Gerald
LOCATION: Cent. Infect. Dis., U. S. Dep. Health and Hum. Serv., Atlanta, GA, USA
JOURNAL: AIDS Res. Hum. Retroviruses DATE: 1990 VOLUME: 6 NUMBER: 11
PAGES: 1323-9 CODEN: ARHRE7 ISSN: 0889-2229 LANGUAGE: English

4/3,AB/7 (Item 7 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

108181185 CA: 108(21)181185f JOURNAL
Organization and differential activation of a gene family encoding the plant defense enzyme chalcone synthase in Phaseolus vulgaris
AUTHOR(S): Ryder, Thomas B.; Hedrick, Susan A.; Bell, John N.; Liang,

Xaiowu; Clouse, Steven D.; Lamb, Christopher J.
LOCATION: Plant Biol. Lab., Salk Inst. Biol. Stud., San Diego, CA, 92138, USA
JOURNAL: MGG, Mol. Gen. Genet. DATE: 1987 VOLUME: 210 NUMBER: 2
PAGES: 219-33 CODEN: MGGEAE ISSN: 0026-8925 LANGUAGE: English

4/3,AB/8 (Item 8 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

107128033 CA: 107(15)128033h JOURNAL
DNA replication of the resistance plasmid R100 and its control
AUTHOR(S): Ohtsubo, Hisako; Ryder, Thomas B.; Maeda, Yoshimi; Armstrong, Karen; Ohtsubo, Eiichi
LOCATION: Inst. Appl. Microbiol., Univ. Tokyo, Tokyo, Japan, 113
JOURNAL: Adv. Biophys. DATE: 1986 VOLUME: 21, PAGES: 115-33 CODEN: ADVBAT ISSN: 0065-227X LANGUAGE: English

4/3,AB/9 (Item 9 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

105222681 CA: 105(25)222681y JOURNAL
Molecular response of plants to infection
AUTHOR(S): Lamb, Chris J.; Bell, John N.; Cramer, Carole C.; Dildine, Sandra L.; Grand, Claude; Hedrick, Susan A.; Ryder, Thomas B.; Showalter, Allan M.
LOCATION: Plant Biol. Lab., Salk Inst. Biol. Stud., San Diego, CA, 92138, USA
JOURNAL: Beltsville Symp. Agric. Res. DATE: 1986 VOLUME: 10 NUMBER: Biotechnol. Solving Agric. Probl. PAGES: 237-51 CODEN: BSARDN ISSN: 0160-3612 LANGUAGE: English

4/3,AB/10 (Item 10 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

105003693 CA: 105(1)3693a JOURNAL
Differential accumulation of plant defense gene transcripts in a compatible and an incompatible plant-pathogen interaction
AUTHOR(S): Bell, John N.; Ryder, Thomas B.; Wingate, Vincent P. M.; Bailey, John A.; Lamb, Chris J.
LOCATION: Plant Biol. Lab., Salk Inst. Biol. Stud., San Diego, CA, 92138, USA

JOURNAL: Mol. Cell. Biol. DATE: 1986 VOLUME: 6 NUMBER: 5 PAGES: 1615-23 CODEN: MCEBD4 ISSN: 0270-7306 LANGUAGE: English

4/3,AB/11 (Item 11 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

103003891 CA: 103(1)3891x JOURNAL
Co-ordinated synthesis of phytoalexin biosynthetic enzymes in biologically-stressed cells of bean (Phaseolus vulgaris L.)
AUTHOR(S): Cramer, Carole L.; Bell, John N.; Ryder, Thomas B.; Bailey, John A.; Schuch, Wolfgang; Bolwell, G. Paul; Robbins, Mark P.; Dixon, Richard A.; Lamb, Chris J.
LOCATION: Plant Biol. Lab., Salk Inst. Biol. Stud., San Diego, CA, 92138, USA
JOURNAL: EMBO J. DATE: 1985 VOLUME: 4 NUMBER: 2 PAGES: 285-9 CODEN: EMJODG ISSN: 0261-4189 LANGUAGE: English

4/3,AB/12 (Item 12 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

102110030 CA: 102(13)110030s JOURNAL
Rapid switching of plant gene expression induced by fungal elicitor
AUTHOR(S): Cramer, Carole L.; Ryder, Thomas B.; Bell, John N.; Lamb, Chris J.
LOCATION: Plant Biol. Lab., Salk Inst. Biol. Stud., San Diego, CA, 92138, USA
JOURNAL: Science (Washington, D. C., 1883-) DATE: 1985 VOLUME: 227 NUMBER: 4691 PAGES: 1240-3 CODEN: SCIEAS ISSN: 0036-8075 LANGUAGE: English

4/3,AB/13 (Item 13 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

101188245 CA: 101(21)188245q JOURNAL
Elicitor rapidly induces chalcone synthase mRNA in Phaseolus vulgaris cells at the onset of the phytoalexin defense response
AUTHOR(S): Ryder, Thomas B.; Cramer, Carole L.; Bell, John N.; Robbins, Mark P.; Dixon, Richard A.; Lamb, Chris J.
LOCATION: Plant Biol. Lab., Salk Inst. Biol. Stud., San Diego, CA, 92138, USA
JOURNAL: Proc. Natl. Acad. Sci. U. S. A. DATE: 1984 VOLUME: 81

NUMBER: 18 PAGES: 5724-8 CODEN: PNASA6 ISSN: 0027-8424 LANGUAGE: English

4/3,AB/14 (Item 14 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

99170457 CA: 99(21)170457r DISSERTATION
Molecular evolution of extrachromosomal genomes
AUTHOR(S): Ryder, Thomas Brendan
LOCATION: State Univ. New York, Stony Brook, NY, USA
DATE: 1983 PAGES: 214 pp. CODEN: DABBBA LANGUAGE: English CITATION: Diss. Abstr. Int. B 1983, 44(2), 417 AVAIL: Univ. Microfilms Int., Order No. DA8315076

4/3,AB/15 (Item 15 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

97067047 CA: 97(9)67047s JOURNAL
Analysis of plasmid genome evolution based on nucleotide-sequence comparison of two related plasmids of Escherichia coli
AUTHOR(S): Ryder, Thomas B.; Davison, Daniel B.; Rosen, Jonathan I.; Ohtsubo, Eiichi; Ohtsubo, Hisako
LOCATION: Sch. Med., State Univ. New York, Stony Brook, NY, 11794, USA
JOURNAL: Gene DATE: 1982 VOLUME: 17 NUMBER: 3 PAGES: 299-310 CODEN: GENED6 ISSN: 0378-1119 LANGUAGE: English
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08/480,472

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FILE 'USPAT' ENTERED AT 10:22:08 ON 28 JUN 96
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  *              W E L C O M E   T O   T H E                    *
  *         U. S.   P A T E N T   T E X T   F I L E             *
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=> E MCDONOUGH, S/IN
E#      FILE              FREQUENCY  TERM
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E1      USPAT                    1     MCDONOUGH, ROBERT P/IN
E2      USPAT                    1     MCDONOUGH, ROD/IN
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E4      USPAT                    3     MCDONOUGH, SCOTT D/IN
E5      USPAT                    1     MCDONOUGH, STEPHEN L/IN
E6      USPAT                    3     MCDONOUGH, SUELLEN/IN
E7      USPAT                    1     MCDONOUGH, THEODORE J/IN
E8      USPAT                    1     MCDONOUGH, THERESE/IN
E9      USPAT                   10     MCDONOUGH, THOMAS B/IN
E10     USPAT                    1     MCDONOUGH, THOMAS F/IN
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=> E KACIAN, D/IN
E#      FILE              FREQUENCY  TERM
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E1      USPAT                    1     KACHURE, WILLIAM R/IN
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E5      USPAT                    1     KACICZ, JOSEPH M/IN
E6      USPAT                    1     KACIN, JOSEPH J/IN
E7      USPAT                    1     KACIR, IVAN R/IN
E8      USPAT                    1     KACIR, LIOR/IN
E9      USPAT                    1     KACIREK, HARMUT/IN
E10     USPAT                    2     KACIREK, KENNETH J/IN
E11     USPAT                    1     KACIREK, RAUL/IN
E12     USPAT                    2     KACK, JAMES W/IN
=> S E4
L1             5 "KACIAN, DANIEL L"/IN
=> D L1 CIT AB 1-5

1.  5,480,784, Jan. 2, 1996, Nucleic acid sequence amplification methods;
**Daniel L. Kacian**, et al., 435/91.21, 91.2 [IMAGE AVAILABLE]

US PAT NO:      5,480,784 [IMAGE AVAILABLE]              L1: 1 of 5

ABSTRACT:
Methods of synthesizing multiple copies of a target nucleic acid sequence
autocatalytically under conditions of substantially constant temperature,
```

ionic strength, and pH are provided in which multiple RNA copies of the target sequence autocatalytically generate additional copies. Nucleotide sequences of target nucleic acid portions and of primers are selected to minimize the ability of the primer to remain able to form a DNA primer extension product of for formation of an RNA:DNA primer hybrid and exposure to RNase H.

2. 5,399,491, Mar. 21, 1995, Nucleic acid sequence amplification methods; **Daniel L. Kacian**, et al., 435/91.21, 6, 91.2; 536/24.33 [IMAGE AVAILABLE]

US PAT NO: 5,399,491 [IMAGE AVAILABLE] L1: 2 of 5

ABSTRACT:
Methods of synthesizing multiple copies of a target nucleic acid sequence autocatalytically under conditions of substantially constant temperature, ionic strength, and pH are provided in which multiple RNA copies of the target sequence autocatalytically generate additional copies. These methods are useful for generating copies of a nucleic acid target sequence for purposes which include assays to quantitate specific nucleic acid sequences in clinical, environmental, forensic and similar samples, cloning and generating probes.

3. 5,386,024, Jan. 31, 1995, Method to prepare nucleic acids from a biological sample using low pH and acid protease; **Daniel L. Kacian**, et al., 536/25.4; 435/6, 91.1, 184, 199, 212, 219; 436/175; 536/25.41, 25.42; 935/19 [IMAGE AVAILABLE]

US PAT NO: 5,386,024 [IMAGE AVAILABLE] L1: 3 of 5

ABSTRACT:
Method for making available a desired nucleic acid contained in a biological sample, comprising the steps of acidifying said biological sample to a pH at which endogenous nucleases capable of degrading the desired nucleic acid(s) are inactive, contacting said biological sample with an exogenous acid protease active at said pH, incubating said sample until endogenous nuclease activities are reduced to insignificant levels, and raising the pH of the biological sample to a pH sufficient to render the exogenous protease less active.

4. 5,364,763, Nov. 15, 1994, Techniques for preparing specimens for bacterial assays; **Daniel L. Kacian**, 435/7.32, 4, 6, 7.1, 34, 268, 270, 810, 863, 961, 962, 975 [IMAGE AVAILABLE]

US PAT NO: 5,364,763 [IMAGE AVAILABLE] L1: 4 of 5

ABSTRACT:

Methods and compositions for improved liquification of mucoid secretion specimens by treatment with a disulfide bond reducing agent and a DNA digestion agent, and for improved concentration of selected bacterial species from such specimens, are disclosed. The disclosure has applicability to bacterial assay techniques including nucleic acid hybridization, culture and stain techniques.

5. 5,132,207, Jul. 21, 1992, Accelerated nucleic acid reassociation method; David E. Kohne, et al., 435/6; 536/25.4, 25.42; 935/1, 78, 80 [IMAGE AVAILABLE]

US PAT NO: 5,132,207 [IMAGE AVAILABLE] L1: 5 of 5

ABSTRACT:
A method for the formation of double stranded nucleic acid molecules from separate single stranded nucleic acid molecules in a single phase reaction solution is disclosed wherein the rate of reaction is greatly increased over the rate of reaction at standard reference conditions. The greatly accelerated reaction rate is accomplished through the use of known concentrations of nucleic acid precipitating agents which are added to the reaction solution. Nucleic acid denaturing agents may also be added. The solution so formed is incubated and then assayed for the presence of double stranded nucleic acid molecules.

```
=> E DATTAGUPTA, N/IN
E#      FILE            FREQUENCY  TERM
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E1      USPAT                1     DATTA, VIJAY J/IN
E2      USPAT                1     DATTA, VIJAY JANG/IN
E3      USPAT                0 --> DATTAGUPTA, N/IN
E4      USPAT               22     DATTAGUPTA, NANIBHUSHAN/IN
E5      USPAT                2     DATTANI, PRAVIN K/IN
E6      USPAT                1     DATTATREYAMURTY, BOSUKONDA/IN
E7      USPAT                2     DATTATRI, KAYSHAV/IN
E8      USPAT                1     DATTE, MARK A/IN
E9      USPAT                1     DATTGE, DIETER/IN
E10     USPAT                1     DATTI, ALESSANDRO/IN
E11     USPAT                4     DATTILO, ANTHONY J/IN
E12     USPAT               15     DATTILO, DONALD J/IN
=> S 435/CLS
L2            0 435/CLS
=> S 435/CLAS
L3        32918 435/CLAS
=> S E4
L4           22 "DATTAGUPTA, NANIBHUSHAN"/IN
=> S L3 AND L4
L5           22 L3 AND L4
=> D L5 CIT AB 1-22
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1. 5,348,855, Sep. 20, 1994, Assay for nucleic acid sequences in an unpurified sample; **Nanibhushan Dattagupta**, et al., **435/6**, **29**, **34**, **35**, **36**; 436/63, 501; 536/24.3; 935/78 [IMAGE AVAILABLE]

US PAT NO: 5,348,855 [IMAGE AVAILABLE] L5: 1 of 22

ABSTRACT:
A method for detecting (i) one or more microorganisms or (ii) nucleic acid sequences from a prokaryotic source or an eukaroytic source in an unpurified nucleic acid-containing test sample comprising
(a) labeling the nucleic acids in the test sample,
(b) contacting, under hybridization conditions, the labeled hybridizable nucleic acid and one or more immobilized hybridizable nucleic acid probes comprising (i) one or more known microorganisms or (ii) sequences from eukaroytic or prokaryotic sources, to form hybridized labeled nucleic acids, and
(d) assaying for the hybridized nucleic acids by detecting the label. The method can be used to detect genetic disorders, e.g., sickle-cell anemia.

2. 5,294,534, Mar. 15, 1994, Amplification method for polynucleotide assays; **Nanibhushan Dattagupta**, et al., **435/6**, **18**, **91.2**, **199**; 935/17, 78 [IMAGE AVAILABLE]

US PAT NO: 5,294,534 [IMAGE AVAILABLE] L5: 2 of 22

ABSTRACT:
A process for detecting a nucleic acid sequence in a sample comprising:
(1) treating said sample under hybridization conditions with an oligonucleotide that lacks a recognition site for enzyme digestion;
(2) extending the hybridization product from step (1) by adding polymerase and NTPs to create on the oligonucleotide strand a recognition site for enzyme digestion;
(3) treating the product of step (2) with labeled probe, which is immobilized or immobilizable and which contains a recognition site for enzyme digestion that is completely or partially complementary to the recognition site for enzyme digestion on the oligonucleotide strand, under conditions that the oligonucleotide strand becomes hybridized to the labeled probe;
(4) digesting the separated hybridization product of step (3) with restriction endonuclease; and
(5) detecting the separated label which is released in solution. A kit for use in detecting the presence of a nucleic acid sequence in a sample, which comprises (1) labeled probe, (2) an oligonucleotide sequence for extension, and (3) a restriction endonuclease is also disclosed.

3. 5,215,899, Jun. 1, 1993, Nucleic acid amplification employing ligatable hairpin probe and transcription; **Nanibhushan Dattagupta**, **435/6**, **91.2**, **91.21**, **172.3**, **320.1**, **805**; 436/501, 508, 538, 815; 536/24.3, 24.31, 24.32; 935/2, 18, 19, 78, 88, 110 [IMAGE AVAILABLE]

US PAT NO: 5,215,899 [IMAGE AVAILABLE] L5: 3 of 22

ABSTRACT:
Specific nucleic acid sequences are amplified through the use of a hairpin probe which, upon hybridization with and ligation to, a target sequence is capable of being transcribed. The probe comprises a single stranded self-complementary sequence which, under hybridizing conditions, forms a hairpin structure having a functional promoter region, and further comprises a single stranded probe sequence extending from the 3' end of the hairpin sequence. Upon hybridization with a target sequence complementary to the probe sequence and ligation of the 3' end of the hybridized target sequence to the 5' end of the hairpin probe, the target sequence is rendered transcribable in the presence of a suitable RNA polymerase and appropriate ribonucleoside triphosphate (rNTPs). Amplification is accomplished by hybridizing the desired target nucleic acid sequence with the probe, ligating the target sequence to the probe, adding the RNA polymerase and rNTPs to the separated hybrids, and allowing transcription to proceed until a desired amount of RNA transcription product has accumulated. The amplification method is particularly useful in assays for the detection of particular nucleic acid sequences.

4. 5,026,840, Jun. 25, 1991, Photochemical nucleic acid-labeling reagent having a polyalklamine spacer; **Nanibhushan Dattagupta**, et al., 536/25.32; **435/4**, **6**, **188**; 436/63, 94, 501 [IMAGE AVAILABLE]

US PAT NO: 5,026,840 [IMAGE AVAILABLE] L5: 4 of 22

ABSTRACT:
A photochemical nucleic acid-labeling reagent of the formula ##STR1## wherein Q is a photoreactive residue of a nucleic acid-binding ligand; L is a detectable label residue; R is hydrogen, C.sub.1 to C.sub.7 -alkyl, aryl, hydroxy, or C.sub.1 to C.sub.7 -alkoxy; x is an integer from 2 through 7; and Y is an integer from 3 through 10; wherein R and x, respectively, can be the same or different each time they appear in the formula. The reagent is useful in the highly efficient labeling of nucleic acids for the purpose of detection in hybridization assays.

5. 4,968,602, Nov. 6, 1990, Solution-phase single hybridization assay for detecting polynucleotide sequences; **Nanibhushan Dattagupta**, **435/6**, **7.21**, **7.92**, **29**, **34**, **803**; 436/63 [IMAGE

AVAILABLE]

US PAT NO: 4,968,602 [IMAGE AVAILABLE] L5: 5 of 22

ABSTRACT:
A process for determining the presence of a particular nucleic acid sequence in a test sample comprising
(a) chemically modifying nucleic acids in the test sample either to introduce a label or a reactive site in a manner that supports their hybridizability,
(b) contacting under hybridization conditions the chemically modified sample nucleic acids with a hybridizable nucleic acid probe which either, when the sample nucleic acids have been modified to introduce a label, carrys a reactive site or, when the sample nucleic acids have been modified to introduce a reactive site, is labeled,
(c) contacting the solution resulting from step (b) with a immobilized form of a reactive partner to the reactive site to form a stable bond with the reactive site on the sample nucleic acids or the probe, respectively,
(d) separating the resulting immobilized fraction from the remaining solution, and
(e) determining the presence of the label in the separated immobilized fraction or a decrease in the label in the remaining solution.

6. 4,959,309, Sep. 25, 1990, Fast photochemical method of labelling nucleic acids for detection purposes in hybridization assays; **Nanibhushan Dattagupta**, et al., **435/6**, **4**, **7.92**, **18**, **28**, **188**; 436/63, 94, 501, 504; 536/24.3, 24.31, 24.32, 25.32; 546/109; 548/303.1; 935/78 [IMAGE AVAILABLE]

US PAT NO: 4,959,309 [IMAGE AVAILABLE] L5: 6 of 22

ABSTRACT:
A labeled nucleic acid probe comprising (a) a nucleic acid component, (b) a nucleic acid-binding ligand photochemically linked to the nucleic acid component, and (c) a label chemically linked to the nucleic acid-binding ligand. The label can be a specifically bindable ligand such as a hapten or biotin, an enzyme such as a .beta.-galactosidase or horse radish peroxidase, a fluorescent radical, a phycobiliprotein, a luminescent radical, or a radioisotope. The probe can be used in assays of nucleic acids, taking advantage of the ability of the nucleic acid component to hydridize.

7. 4,950,744, Aug. 21, 1990, Photochemical nucleic acid-labeling reagent having a polyalkylamine spacer; **Nanibhushan Dattagupta**, et al., 536/24.3; **435/4**, **6**, **188**; 436/63, 94, 501; 536/25.32, 26.6; 548/463; 549/282; 935/77, 78 [IMAGE AVAILABLE]

US PAT NO: 4,950,744 [IMAGE AVAILABLE] L5: 7 of 22

ABSTRACT:
A photochemical nucleic acid-labeling reagent of the formula ##STR1## wherein Q is a photoreactive residue of a nucleic acid-binding ligand; L is a detectable label residue; R is hydrogen, C.sub.1 to C.sub.7 -alkyl, aryl, hydroxy, or C.sub.1 to C.sub.7 -alkoxy; x is an integer from 2 through 7; and y is an integer from 3 through 10; wherein R and x, respectively, can be the same or different each time they appear in the formula. The reagent is useful in the highly efficient labeling of nucleic acids for the purpose of detection in hybridization assays.

8. 4,950,588, Aug. 21, 1990, Prolonged enhanced chemiluminescence; **Nanibhushan Dattagupta**, **435/6**, **28**, **810**; 436/501, 518, 544, 800, 805 [IMAGE AVAILABLE]

US PAT NO: 4,950,588 [IMAGE AVAILABLE] L5: 8 of 22

ABSTRACT:
A chemiluminescence process comprising the contacting of a chemiluminescence precursor, an oxidant, an enzyme, a chemiluminescence enhancer and a nitrogen compound selected from the group consisting of ammonia and water-soluble organic amines. The reaction of such process can be used in detection of nucleic acid hybrids, antibodies, antigens and peroxidase enzymes and in producing light.

9. 4,853,327, Aug. 1, 1989, Enhanced phthalazinedione chemiluminescence; **Nanibhushan Dattagupta**, **435/6**; 252/700; 362/24; **435/7.1**, **8**, **28**, **805**, **809**, **810**, **968** [IMAGE AVAILABLE]

US PAT NO: 4,853,327 [IMAGE AVAILABLE] L5: 9 of 22

ABSTRACT:
A chemiluminescence process comprising the contacting of a chemiluminescence precursor, an oxidant, an enzyme and a nitrogen compound selected from the group consisting of ammonia and a water-soluble organic amine. The reaction of such process can be used in detection of nucleic acid hybrids, antibodies, antigens and peroxidase enzymes and in producing light.

10. 4,824,775, Apr. 25, 1989, Cells labeled with multiple Fluorophores bound to a nucleic acid carrier; **Nanibhushan Dattagupta**, et al., **435/4**, **6**, **29**, **240.2**, **243**; 436/519, 546; 514/2, 44 [IMAGE AVAILABLE]

US PAT NO: 4,824,775 [IMAGE AVAILABLE] L5: 10 of 22

ABSTRACT:
In passing labeled cells through a cell sorter, the improvement which comprises employing a labeled cell comprising a cell, an antibody specific to and bound to such cell, a nucleic acid fragment joined to said antibody, and a plurality of labels on said nucleic acid fragment. Because of the presence of multiple labels, the sensitivity of the separation of labeled cells is increased.

11. 4,818,681, Apr. 4, 1989, Fast and specific immobilization of nucleic acids to solid supports; **Nanibhushan Dattagupta**, **435/6**, **91.5**; 436/94; 536/24.31, 25.3, 25.4; 935/78 [IMAGE AVAILABLE]

US PAT NO: 4,818,681 [IMAGE AVAILABLE] L5: 11 of 22

ABSTRACT:
A process for synthesizing an oligonucleotide comprising linking a nucleoside phosphate to a solid support, through the heterocyclic moiety of the nucleoside, coupling a mono- or oligonucleotide to the nucleoside phosphate through its phosphate moiety, in at least one step enzymatically lengthening the mono- or oligonucleotide, cleaving the resultant oligonucleotide from the solid support-nucleoside phosphate at the phosphate moiety of the nucleoside, and separating the oligonucleotide. After cleaving and separating the solid support-nucleoside phosphate is recycled for further coupling. Advantageously the solid support-nucleoside phosphate is phosphorylated between separation and recycling.

12. 4,808,520, Feb. 28, 1989, Labelling of oligonucleotides; **Nanibhushan Dattagupta**, et al., **435/6**, **91.5**, **91.51**; 536/24.3; 935/8, 78 [IMAGE AVAILABLE]

US PAT NO: 4,808,520 [IMAGE AVAILABLE] L5: 12 of 22

ABSTRACT:
A method is provided of making an oligonucleotide which comprises hybridizing (a) a shorter fragment of the desired oligonucleotide with (b) a nucleic acid fragment longer than (a) and complementary to the desired oligonucleotide, one of (a) and (b) is linked to an organic radical which differentiates its physical properties relative to the other of (a) and (b), contacting the hybridized material with an enzyme and nucleoside triphosphates whereby the shorter fragment is extended in one direction until it is substantially coterminal with the complementary nucleic acid fragment, denaturing the hybridized material and separating lengthened (a) from (b).

13. 4,794,073, Dec. 27, 1988, Detection of nucleic acid hybrids by

prolonged chemiluminescence; **Nanibhushan Dattagupta**, et al., **435/6**; 252/700; **435/28**; 536/24.3, 25.32; 544/237 [IMAGE AVAILABLE]

US PAT NO: 4,794,073 [IMAGE AVAILABLE] L5: 13 of 22

ABSTRACT:
A nucleic acid probe capable of participating in a chemiluminescent reaction comprising a defined nucleic acid sequence, the sequence being linked to any one of
a. a chemiluminescence precursor,
b. a chemiluminescence enhancer, and
c. an enzyme the remaining two of (a), (b) and (c) not linked to the sequence being in a mixture of the linked sequence. A method for determining a particular single stranded polynucleotide sequence in a test medium, comprising the steps of:
(a) combining the test medium with a polynucleotide probe having a base sequence substantially complementary to the sequence to be determined,
(b) labeling either the resulting hybrids or probe which has not hybridized with the sequence to be determined with one of the participants in an enhanced chamiluminescent reaction involving a chemiluminescent precursor, an enzyme, an oxidant, and a chemiluminescence enhancer,
(c) initiating such chemiluminent reaction with the labeled hybrid or probe, and
(d) detecting the resulting light emission.

14. 4,777,129, Oct. 11, 1988, Nucleic acid probe detectable by specific nucleic acid binding protein; **Nanibhushan Dattagupta**, et al., **435/6**, **7.9**, **7.92**, **34**, **39**; 436/501, 504, 508, 808, 811; 536/24.3, 25.32; 935/76, 77, 78 [IMAGE AVAILABLE]

US PAT NO: 4,777,129 [IMAGE AVAILABLE] L5: 14 of 22

ABSTRACT:
A nucleic acid detection probe comprising a hybridizable single stranded portion of nucleic acid connected with a non-hybridizable, single or double stranded nucleic acid portion, the non-hybridizable portion preferably including a recognition site for binding by a particular protein. Such recognition site can be a region of singly or doubly stranded nucleic acid specific for a particular nucleic acid binding protein such as lac repressor protein or can be a modified nucleic acid region such as a unique antigenic determinant introduced by interaction of the region with a modifier compound such as an intercalating agent or a platinum-containing ligand. The probe-binding protein can be labeled for ease of detection and in the case of an antigenic determinant binding site can be labeled antibody.

15. 4,748,111, May 31, 1988, Nucleic acid-protein conjugate used in immunoassay; **Nanibhushan Dattagupta**, et al., **435/6**, **7.23**, **7.24**, **7.95**, **964**; 436/518, 547, 828; 530/402 [IMAGE AVAILABLE]

US PAT NO: 4,748,111 [IMAGE AVAILABLE] L5: 15 of 22

ABSTRACT:
A protein is covalently coupled to a 3'terminal end of a nucleic acid which carries several labels. In an assay the protein will specifically recognize some component of a test system; in an immunoassay the protein can be Protein A which will recognize the FC portion of IgG which is bound to an unknown antigen if present in the test sample.

16. 4,737,454, Apr. 12, 1988, Fast photochemical method of labelling nucleic acids for detection purposes in hybridization assays; **Nanibhushan Dattagupta**, et al., 536/24.31; **435/4**, **6**; 536/25.3, 25.32; 935/77, 78 [IMAGE AVAILABLE]

US PAT NO: 4,737,454 [IMAGE AVAILABLE] L5: 16 of 22

ABSTRACT:
A labeled nucleic acid probe comprising (a) a nucleic acid component, (b) a nucleic acid-binding ligand photochemically linked to the nucleic acid component, and (c) a label chemically linked to the nucleic acid-binding ligand. The label can be a specifically bindable ligand such as a hapten or biotin, an enzyme such as a .beta.-galactosidase or horse radish peroxidase, a fluorescent radical, a phycobiliprotein, a luminescent radical, or a radioisotope. The probe can be used in assays of nucleic acids, taking advantage of the ability of the nucleic acid component to hybridize.

17. 4,734,363, Mar. 29, 1988, Large scale production of DNA probes; **Nanibhushan Dattagupta**, et al., **435/91.5**, **6**, **91.51**; 536/24.3, 25.3, 25.32; 935/2, 78 [IMAGE AVAILABLE]

US PAT NO: 4,734,363 [IMAGE AVAILABLE] L5: 17 of 22

ABSTRACT:
A process for production of a single strand of a nucleic acid comprising covalently linking to a solid substrate a polynucleotide complementary to the desired strand, hybridizing said polynucleotide with an oligonucleotide, extending the oligonucleotide in direction away from said substrate, denaturing the hybridized polynucleotide and extended oligonucleotide, thereby to free the extended oligonucleotide from the solid substrate, and separating the extended oligonucleotide. The product can be used for making analytical probes.

18. 4,724,202, Feb. 9, 1988, Use of non-hybridizable nucleic acids for the detection of nucleic acid hybridization; **Nanibhushan Dattagupta**, et al., **435/6**; 436/518, 811; 536/24.3, 25.32; 935/78 [IMAGE AVAILABLE]

US PAT NO: 4,724,202 [IMAGE AVAILABLE] L5: 18 of 22

ABSTRACT:
A detection probe comprising a hybridizable single stranded portion of nucleic acid connected with a non-hybridizable, single or double stranded nucleic acid portion, the non-hybridizable portion preferably including a recognition site for a particular protein.

19. 4,713,326, Dec. 15, 1987, Coupling of nucleic acids to solid support by photochemical methods; **Nanibhushan Dattagupta**, et al., **435/6**; 422/57; 436/63, 94, 501; 536/25.32; 935/78 [IMAGE AVAILABLE]

US PAT NO: 4,713,326 [IMAGE AVAILABLE] L5: 19 of 22

ABSTRACT:
A solid support capable of binding a nucleic acid thereto upon suitable irradiation, comprising (a) a solid substrate, (b) a photochemically reactive intercalator compound or other nucleic acid-binding ligands, and (c) divalent radical chemically linking the substrate and the ligand (b). Specifically, a hydroxy group-containing solid substrate such as nitrocellulose paper is linked via a bifunctional reagent such as cyanogen bromide or 1,4-butanedioldiglycidyl ether to an amino-substituted angelicin or psoralen or ethidium bromide which in turn is photochemically linked to a nucleic acid. The resulting immobilized nucleic acid probe is capable of hybridizing with complementary nucleic acid fragments and is thereby useful in diagnostic assays.

20. 4,692,509, Sep. 8, 1987, Radioactive labeling of proteins with nucleosides or nucleotides; **Nanibhushan Dattagupta**, 530/303; 422/61; **435/6**, **29**, **34**; 436/547, 804, 828; 530/380, 389.1, 391.5, 395, 406, 410, 411, 868 [IMAGE AVAILABLE]

US PAT NO: 4,692,509 [IMAGE AVAILABLE] L5: 20 of 22

ABSTRACT:
A radioactively labeled protein comprising a protein, and a radioactive nucleoside or nucleotide, the protein being covalently linked to the nucleoside or nucleotide. Advantageously the linkage is through an NH.sub.2 group of the protein and through a carbonyl group of a ring-opened sugar moiety of the nucleoside or nucleotide. The protein can be insulin, an immunoglobulin or protein A. The radioactive moiety may be

a P, C, S, H, I or Hg atom. The labels can be used to indicate the presence and amount of the protein in a biological assay.

21. 4,670,380, Jun. 2, 1987, Assays utilizing labeled nucleic acid probes; **Nanibhushan Dattagupta**, **435/6**; 935/78 [IMAGE AVAILABLE]

US PAT NO: 4,670,380 [IMAGE AVAILABLE] L5: 21 of 22

ABSTRACT:
In a method for determining a particular polynucleotide sequence in a test medium containing single stranded nucleic acids wherein the sample is subjected to a hybridization reaction with a labeled detection probe having a substantially complementary polynucleotide sequence, and wherein after hybridization the label in said probe is assayed, the improvement wherein the label in said labeled probe comprises a fluorescent nucleotide which is linked by a phosphate ester linkage to said probe. Probes and kits therefor are also provided.

22. 4,542,102, Sep. 17, 1985, Coupling of nucleic acids to solid support by photochemical methods; **Nanibhushan Dattagupta**, et al., **435/6**; 422/57; 436/63, 94; 536/24.3, 25.32, 25.4; 935/78 [IMAGE AVAILABLE]

US PAT NO: 4,542,102 [IMAGE AVAILABLE] L5: 22 of 22

ABSTRACT:
A solid support capable of binding a nucleic acid thereto upon suitable irradiation, comprising (a) a solid substrate, (b) a member selected from the group consisting of a furocoumarin, a phenanthridium halide, and photochemically reactive derivatives thereof, and (c) a divalent radical chemically linking the substrate and the member (b). Specifically, a hydroxy group-containing solid substrate such as nitrocellulose paper is linked via a bifunctional reagent such as cyanogen bromide or 1,4-butanediol diglycidyl ether to an amino-substituted angelicin or psoralen or phenanthridinium bromide which in turn is photochemically linked to a nucleic acid. This is capable of hybridizing with other nucleic acid fragments and is thereby useful in diagnostic assays.

=> E MCALLISTER, D/IN

E#	FILE	FREQUENCY	TERM
E1	USPAT	4	MCALLISTER, CLARKE W/IN
E2	USPAT	1	MCALLISTER, CURTIS R/IN
E3	USPAT	0 -->	MCALLISTER, D/IN
E4	USPAT	2	MCALLISTER, DAN R/IN
E5	USPAT	1	MCALLISTER, DAVID A/IN
E6	USPAT	1	MCALLISTER, DAVID E/IN
E7	USPAT	1	MCALLISTER, DAVID K/IN
E8	USPAT	1	MCALLISTER, DAVID L/IN

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E9      USPAT                   1      MCALLISTER, DAVID R/IN
E10     USPAT                   1      MCALLISTER, DON M/IN
E11     USPAT                   1      MCALLISTER, DONALD F/IN
E12     USPAT                   1      MCALLISTER, E STEVEN/IN
=> S PROMOTER(W)PRIMER#
         17009 PROMOTER
         18198 PRIMER#
L6           27 PROMOTER(W)PRIMER#
=> D L6 CIT AB 1-27
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1. 5,527,690, Jun. 18, 1996, Methods and compositions relating to sterol regulatory element binding proteins; Joseph L. Goldstein, et al., 435/69.1, 172.1, 172.3, 240.2, 252.3; 536/23.1, 23.5, 24.1 [IMAGE AVAILABLE]

US PAT NO: 5,527,690 [IMAGE AVAILABLE] L6: 1 of 27

ABSTRACT:
A sterol regulatory element (SRE) binding protein (SREBP) which activates transcription from SREs, such as SRE-1 of the low density lipoprotein (LDL) receptor gene, is disclosed, as are DNA segments encoding SREBPs such as an SREBP-1 or SREBP-2. Also described are methods for using SREBP to promote SRE-mediated transcription and LDL receptor production in the presence of sterols, and screening assay for the identification of further agents with such properties. The SREBP and other agents may be used to reduce plasma cholesterol levels and to treat various medical problems associated with hypercholesterolemia.

2. 5,525,486, Jun. 11, 1996, Process for constructing cDNA library, and novel polypeptide and DNA coding for the same; Tasuku Honjo, et al., 435/69.1, 6, 69.4, 91.2, 91.4, 91.5, 91.51, 91.52, 172.3, 183, 320.1; 536/23.1, 25.3; 935/78, 88 [IMAGE AVAILABLE]

US PAT NO: 5,525,486 [IMAGE AVAILABLE] L6: 2 of 27

ABSTRACT:
The present invention relates to (1) a process for constructing a cDNA library which has a selectivity for signal peptides, that makes it possible to efficiently find out an unknown and useful polypeptide and a high efficiency; and relates to (2) a novel polypeptide consisting of 89 amino acids (including a signal peptide) produced by a stroma cell line, which is useful as an agent for preventing or treating, for example, anemia, leukopenia or infections and the like, and DNAs encoding for said polypeptide.

3. 5,514,551, May 7, 1996, Compositions for the detection of Chlamydia trachomatis; Yeasing Yang, et al., 435/6, 91.2; 536/24.3, 24.32 [IMAGE

AVAILABLE]

US PAT NO: 5,514,551 [IMAGE AVAILABLE] L6: 3 of 27

ABSTRACT:
Oligonucleotides and methods for the amplification and specific detection of Chlamydia trachomatis. The invention relates to amplification oligonucleotides capable of amplifying Chlamydia trachomatis nucleotide sequences and to probes and helper oligonucleotides for the specific detection of Chlamydia trachomatis nucleic acids. The invention also relates to methods for using the oligonucleotides of the present invention and specific combinations and kits useful for the detection of Chlamydia trachomatis.

4. 5,512,445, Apr. 30, 1996, Methods for the detection of Chlamydia trachomatis; Yeasing Yang, et al., 435/6, 91.2; 536/24.3, 24.32 [IMAGE AVAILABLE]

US PAT NO: 5,512,445 [IMAGE AVAILABLE] L6: 4 of 27

ABSTRACT:
Oligonucleotides and methods for the amplification and specific detection of Chlamydia trachomatis. The invention relates to amplification oligonucleotides capable of amplifying Chlamydia trachomatis nucleotide sequences and to probes and helper oligonucleotides for the specific detection of Chlamydia trachomatis nucleic acids. The invention also relates to methods for using the oligonucleotides of the present invention and specific combinations and kits useful for the detection of Chlamydia trachomatis.

5. 5,498,830, Mar. 12, 1996, Decreased oil content in plant seeds; Gerard F. Barry, et al., 800/205; 435/134; 194; 536/23.2, 23.6, 23.7; 800/230, 250, 255 [IMAGE AVAILABLE]

US PAT NO: 5,498,830 [IMAGE AVAILABLE] L6: 5 of 27

ABSTRACT:
Promoters for enhanced expression of ADPglucose pyrophosphorylase in potato tubers and fruits such as tomato; methods of using them; DNA molecules, plant cells and plants containing them. A method of decreasing the oil content of seeds by expression of ADPglucose pyrophosphorylase.

6. 5,480,972, Jan. 2, 1996, Allergenic proteins from Johnson grass pollen; Asil Avjioglu, et al., 530/379; 435/69.3; 536/23.6 [IMAGE AVAILABLE]

US PAT NO: 5,480,972 [IMAGE AVAILABLE] L6: 6 of 27

ABSTRACT:
The present invention provides a nucleic acid having a nucleotide sequence coding for Sor h I, a major allergen of Sorghum halepense, and fragments thereof. The present invention also provides purified Sor h I or at least one fragment thereof, produced in a host cell transformed with a nucleic acid sequence coding for Sor h I, or at least one fragment thereof and fragments of Sor h prepared synthetically. Sor h I and fragments thereof are useful for diagnosing, treating, and preventing allergy to Johnson grass pollen.

7. 5,480,784, Jan. 2, 1996, Nucleic acid sequence amplification methods; Daniel L. Kacian, et al., 435/91.21, 91.2 [IMAGE AVAILABLE]

US PAT NO: 5,480,784 [IMAGE AVAILABLE] L6: 7 of 27

ABSTRACT:
Methods of synthesizing multiple copies of a target nucleic acid sequence autocatalytically under conditions of substantially constant temperature, ionic strength, and pH are provided in which multiple RNA copies of the target sequence autocatalytically generate additional copies. Nucleotide sequences of target nucleic acid portions and of primers are selected to minimize the ability of the primer to remain able to form a DNA primer extension product of for formation of an RNA:DNA primer hybrid and exposure to RNase H.

8. 5,474,916, Dec. 12, 1995, Promotor controlled specific amplification of nucleic acid sequences; Udo Reischl, et al., 435/91.2, 6; 536/24.1 [IMAGE AVAILABLE]

US PAT NO: 5,474,916 [IMAGE AVAILABLE] L6: 8 of 27

ABSTRACT:
Process for the specific production of nucleic acids based on the principle of transcription in which a promoter oligonucleotide and a template-specific oligonucleotide which can hybridize with it are used as a promoter reagent and a process for nucleic acid detection which is based on this process.

9. 5,472,840, Dec. 5, 1995, Nucleic acid structures with catalytic and autocatalytic replicating features and methods of use; James E. Stefano, 435/6, 91.21; 536/23.1, 24.3 [IMAGE AVAILABLE]

US PAT NO: 5,472,840 [IMAGE AVAILABLE] L6: 9 of 27

ABSTRACT:
Methods and compositions are described for making ribozymes which can

release or activate molecules including autocatalytically replicatable RNA such as MDV-1.

10. 5,418,147, May 23, 1995, Glycosyl-phosphatidylinositol-specific phospholipase D; Kuo-Sen Huang, et al., 435/69.1, 68.1, 69.7, 69.8, 198, 252.3, 320.1; 536/23.2, 23.4; 935/47, 48 [IMAGE AVAILABLE]

US PAT NO: 5,418,147 [IMAGE AVAILABLE] L6: 10 of 27

ABSTRACT:
The present invention involves the protein glycosyl-phosphatidyl-specific phospholipase D (GPI-PLD) in a substantially pure form, an isolated nucleotide sequence encoding GPI-PLD, vectors containing the isolated nucleotide sequence encoding GPI-PLD, and cells transformed by a vector containing the isolated nucleotide sequence encoding GPI-PLD, also nucleotide sequences, vectors and cells comprising hybrid genes with GPI-PLD, and methods for producing secreted proteins.

11. 5,416,008, May 16, 1995, Cross-regulation of gene expression in recombinant cells; James E. Bailey, et al., 435/69.1, 71.1, 71.2, 172.3, 252.33, 254.21 [IMAGE AVAILABLE]

US PAT NO: 5,416,008 [IMAGE AVAILABLE] L6: 11 of 27

ABSTRACT:
Recombinant cells providing for the controlled expression of product proteins by way of cross-regulation between interacting operons. A structural gene for a product protein and a structural gene for a repressor of a second operon are included in a first operon. A protein encoded by a structural gene of the second operon is a repressor of the first operon. The second operon may reside on a plasmid or a chromosome of the host cell. The present invention provides for controlled expression of product protein over a range of copy numbers, as well as high transcription efficiency in the induced state. The invention includes methods for the controlled expression of product protein by recombinant cells.

12. 5,399,491, Mar. 21, 1995, Nucleic acid sequence amplification methods; Daniel L. Kacian, et al., 435/91.21, 6, 91.2; 536/24.33 [IMAGE AVAILABLE]

US PAT NO: 5,399,491 [IMAGE AVAILABLE] L6: 12 of 27

ABSTRACT:
Methods of synthesizing multiple copies of a target nucleic acid sequence autocatalytically under conditions of substantially constant temperature, ionic strength, and pH are provided in which multiple RNA copies of the

target sequence autocatalytically generate additional copies. These methods are useful for generating copies of a nucleic acid target sequence for purposes which include assays to quantitate specific nucleic acid sequences in clinical, environmental, forensic and similar samples, cloning and generating probes.

13. 5,389,527, Feb. 14, 1995, DNA encoding mammalian phosphodiesterases; Joseph A. Beavo, et al., 435/69.1, 196, 199, 240.1, 252.3, 254.11, 320.1; 536/23.2 [IMAGE AVAILABLE]

US PAT NO: 5,389,527 [IMAGE AVAILABLE] L6: 13 of 27

ABSTRACT:
The present invention relates to novel purified and isolated nucleotide sequences encoding mammalian Ca.sup.2+ /calmodulin stimulated phosphodiesterases (CaM-PDEs) and cyclic-GMP-stimulated phosphodiesterases (cGS-PDEs). Also provided are the corresponding recombinant expression products of said nucleotide sequences, immunological reagents specifically reactive therewith, and procedures for identifying compounds which modulate the enzymatic activity of such expression products.

14. 5,369,003, Nov. 29, 1994, Process for the specific production of ribonucleic acids; Udo Reischl, et al., 435/6, 91.21, 91.3; 536/24.33 [IMAGE AVAILABLE]

US PAT NO: 5,369,003 [IMAGE AVAILABLE] L6: 14 of 27

ABSTRACT:
Process for the production of ribonucleic acids or for the detection of template nucleic acids based on a transcription technique using two oligonucleotides which can hybridize to adjacent regions on the template nucleic acid without ligation of these oligonucleotides.

15. 5,350,671, Sep. 27, 1994, HCV immunoassays employing C domain antigens; Michael Houghton, et al., 435/5, 6, 975; 436/512, 518; 530/300, 326, 327, 328, 812, 826; 930/220, 223 [IMAGE AVAILABLE]

US PAT NO: 5,350,671 [IMAGE AVAILABLE] L6: 15 of 27

ABSTRACT:
Immunoassays for the detection of antibodies to HCV are provided which employ "C" domain antigens. Immunoassay kits comprising such antigens are also provided.

16. 5,348,865, Sep. 20, 1994, Genome coding phytolacca antiviral protein and a recombinant expression vector therefor; Young-Ho Moon, et al.,

435/69.1, 71.3, 172.3, 199, 252.3, 252.33, 320.1; 536/23.2, 23.6; 935/11, 14, 29, 56, 72, 73 [IMAGE AVAILABLE]

US PAT NO: 5,348,865 [IMAGE AVAILABLE] L6: 16 of 27

ABSTRACT:
The present inventors discovered a novel genome coding Phytolacca insularis antiviral protein(PIP) isolated from Phytolacca insularis Nakai; and developed a recombinant vector for said PIP genome expression and a microorganism transformed therewith. PIP genome of the present invention has nucleotide hornology of about 82%, compared with the genome of Phytolacca americana antiviral protein isolated from Phytolacca americana L., which is closely related to the Phytolacca insularis Nakai. PIP cDNA is consist of 918 bp of one open reading frame and termination codon; and polyaclenylation signal which is ubiquitous in mRNA of most plants and animals, appears to be located in the upstream of 33 bp from the polyadenylation site. Recombinant PIP of the invention was proved to inhibit the growth of E. coli HB101 transformed with said expression vector.

17. 5,302,519, Apr. 12, 1994, Method of producing a Mad polypeptide; Elizabeth M. Blackwood, et al., 435/69.1, 6, 69.3, 70.21, 240.2; 530/350, 351; 536/23.1, 23.5 [IMAGE AVAILABLE]

US PAT NO: 5,302,519 [IMAGE AVAILABLE] L6: 17 of 27

ABSTRACT:
Nucleic acid molecules capable of hybridizing under stringent conditions to the nucleotide sequence residing between positions 1 and 453 of the max cDNAs shown in FIG. 2, or to the nucleotide sequence residing between positions 148 and 810 of the mad cDNAs shown in FIG. 14. The Max polypeptide when associated with the Myc or Mad polypeptide is capable of binding to nucleotide sequences containing CACGTG.

18. 5,258,283, Nov. 2, 1993, Detection and differentiation of coxiella burnetii in biological fluids; Marvin E. Frazier, et al., 435/6, 34, 35, 317.1; 436/63, 501; 536/24.32 [IMAGE AVAILABLE]

US PAT NO: 5,258,283 [IMAGE AVAILABLE] L6: 18 of 27

ABSTRACT:
Methods for detecting the presence of Coxiella burnetii in biological samples, as well as a method for differentiating strains of C. burnetii that are capable of causing acute disease from those strains capable of causing chronic disease are disclosed. The methods generally comprise treating cells contained within the biological sample to expose cellular DNA, and hybridizing the cellular DNA with a DNA probe containing DNA

sequences that specifically hybridize with C. burnetii DNA of strains associated with the capacity to cause acute or chronic disease.

19. 5,212,080, May 18, 1993, Method of DNA sequencing using DNA transposon Tn5seql; Dilip K. Nag, et al., 435/172.3, 6, 252.33, 320.1; 935/29, 77 [IMAGE AVAILABLE]

US PAT NO: 5,212,080 [IMAGE AVAILABLE] L6: 19 of 27

ABSTRACT:
A novel transposon useful for sequencing long DNAs is disclosed which comprises a partial sequence of transposon Tn5 with the oligonucleotide primers from phages SP6 and T7 inserted near the opposite ends, respectively, of said transposon Tn5.

20. 5,194,370, Mar. 16, 1993, Promoter ligation activated transcription amplification of nucleic acid sequences; Mark S. Berninger, et al., 435/6, 91.21; 436/94, 501; 935/77, 78 [IMAGE AVAILABLE]

US PAT NO: 5,194,370 [IMAGE AVAILABLE] L6: 20 of 27

ABSTRACT:
This invention discloses a scheme for producing nucleic acid end products that are functionally or exactly identical to the starting products, thereby resulting in exponential amplification of a desired nucleic acid sequence. Specifically, sequences are cycled between RNA and DNA forms using the following basic steps: (1) a T7 RNA polymerase promoter is ligated onto a single-stranded DNA template; (2) T7 RNA polymerase makes many copies of RNA: (3) a complementary DNA is made from the RNA by extension of a primer by reverse transcriptase; and (4) the RNA template is removed by ribonuclease H. This amplification method is useful for purposes such as genetic research and diagnostic assays.

21. 5,180,813, Jan. 19, 1993, Early envelope glycoprotein of human cytomegalovirus (HMCV) and monoclonal antibodies to the glycoproteins; Mark F. Stinski, 530/388.3; 424/147.1, 230.1; 435/70.21, 172.2, 240.27; 530/389.4, 395; 536/23.72 [IMAGE AVAILABLE]

US PAT NO: 5,180,813 [IMAGE AVAILABLE] L6: 21 of 27

ABSTRACT:
The present invention provides an envelope glycoprotein which is encoded by an early structural gene of human cytomegalovirus, and polyclonal and monoclonal antibodies to the early envelope glycoprotein.

22. 5,169,766, Dec. 8, 1992, Amplification of nucleic acid molecules; David M. Schuster, et al., 435/91.2, 6, 91.21, 193, 194 [IMAGE AVAILABLE]

US PAT NO: 5,169,766 [IMAGE AVAILABLE] L6: 22 of 27

ABSTRACT:
A method for amplifying a nucleic acid molecule which employs a proto-promoter-containing nucleic acid molecule having a blocked 3' terminus. The invention also includes kits containing reagents for conducting the method.

23. 5,137,829, Aug. 11, 1992, DNA transposon TN5SEQ1; Dilip K. Nag, et al., 435/320.1, 172.1, 172.3; 935/29 [IMAGE AVAILABLE]

US PAT NO: 5,137,829 [IMAGE AVAILABLE] L6: 23 of 27

ABSTRACT:

A novel transposon useful for sequencing long DNAs is disclosed which comprises a partial sequence of transposon Tn5 with the oligonucleotide primers from phages SP6 and T7 inserted near the opposite ends, respectively, of said transposon Tn5.

24. 5,107,069, Apr. 21, 1992, Adhesion promoter; Jurgen Wichelhaus, et al., 524/314; 427/393.5; 428/378; 524/315, 321; 525/301, 304, 308, 309 [IMAGE AVAILABLE]

US PAT NO: 5,107,069 [IMAGE AVAILABLE] L6: 24 of 27

ABSTRACT:
Described are heat-activatable promoters for treating the surfaces of metals or synthetic materials (plastics) prior to bonding, containing
from 0.1 to 10% by weight of a carbonyl compound having at least one activated double bond,
from 5 to 30% by weight of a polymer having functional groups,
from 0 to 10% by weight of further auxiliary materials, as well as
one or more organic solvent(s) to make 100% by weight.
The invention further relates to a process for producing the heat-activatable adhesion promoter and the use thereof for the surface treatment of polymer fibers.

25. 4,803,019, Feb. 7, 1989, Process for forming a liner and cast propellant charge in a rocket motor casing; William H. Graham, et al., 264/3.1; 102/290; 149/19.4, 19.9, 19.92 [IMAGE AVAILABLE]

US PAT NO: 4,803,019 [IMAGE AVAILABLE] L6: 25 of 27

ABSTRACT:
Process for forming a liner and cast propellant charge in a rocket engine

casing without separately precuring the liner, comprising the steps of providing a blocked curable liner composition which is the reaction product of a prepolymer, an isocyanate curing agent, and a blocking agent; applying the liner composition to an internal surface of a rocket casing; preheating the casing and liner assembly to simultaneously prepare the assembly for receiving a propellant, unblock the liner, and precure the liner to a tacky state; casting the propellant change into interfacial contact with the liner; and cocuring the liner and propellant compositions. The blocked, curable liner composition has a very long pot life which is terminated by heating the composition sufficiently to uncouple the blocking agent from the isocyanate curing agent and initiate a rapid cure. The liner composition does not require precuring, as it is unblocked by preheating the liner and rocket casing sufficiently to receive to cast propellant. The blocked liner composition has the following structure. ##STR1##

26. 4,144,363, Mar. 13, 1979, Process for coating polyolefin films; Riccardo Balloni, et al., 427/322, 393.5, 412.3 [IMAGE AVAILABLE]

US PAT NO: 4,144,363 [IMAGE AVAILABLE] L6: 26 of 27

ABSTRACT:
A surface-activated polyolefin is coated by applying a solution in an organic solvent of a vinylidene copolymer material containing from 35 to 60 wt.% of vinylidene chloride, from 30 to 50 wt.% of alkyl ester of acrylic or methacrylic acid, from 1 to 10 wt.% of acrylic and/or methacrylic acids and from 1 to 10 wt.% of hydroxyalkyl ester of acrylic or methacrylic acid, a ratio of from 0.5:1 to 5:1 being maintained in the material between the number of carboxyl groups and the number of hydroxyl groups and said solution containing a latent catalyst for the cross-linking of said material, and heat-treating at 70.degree.-130.degree. C. said coated film to provoke said cross-linking. The coating shows an excellent adhesion to the film and improves the thermal weldability, impermeability and flexibility of the latter.

27. 4,004,517, Jan. 25, 1977, Pyrotechnic munition and process; Melvin N. Gerber, et al., 102/334; 425/DIG.12 [IMAGE AVAILABLE]

US PAT NO: 4,004,517 [IMAGE AVAILABLE] L6: 27 of 27

ABSTRACT:
A new pyrotechnic munition having an expendable and disintegrable mandrel d a process of manufacture thereof.

=> S PRIMER# (5A) (MODIFIED OR UNMODIFIED)
         18198 PRIMER#
        389028 MODIFIED
         16797 UNMODIFIED
L7   357 PRIMER# (5A) (MODIFIED OR UNMODIFIED)
=> S L7 (5A) (3' OR 5')
       2023107 3
       1926694 '5'
                                S L7 (5A) (END# OR TERMINUS OR TERMINI)

        200181 3' OR 5'
                 (3(1W)'5')
L8   1 L7 (5A) (3' OR 5')
=> D L8 CIT AB

1. 4,808,520, Feb. 28, 1989, Labelling of oligonucleotides; Nanibhushan Dattagupta, et al., 435/6, 91.5, 91.51; 536/24.3; 935/8, 78 [IMAGE AVAILABLE]

US PAT NO: 4,808,520 [IMAGE AVAILABLE] L8: 1 of 1

ABSTRACT:
A method is provided of making an oligonucleotide which comprises hybridizing (a) a shorter fragment of the desired oligonucleotide with (b) a nucleic acid fragment longer than (a) and complementary to the desired oligonucleotide, one of (a) and (b) is linked to an organic radical which differentiates its physical properties relative to the other of (a) and (b), contacting the hybridized material with an enzyme and nucleoside triphosphates whereby the shorter fragment is extended in one direction until it is substantially coterminal with the complementary nucleic acid fragment, denaturing the hybridized material and separating lengthened (a) from (b).
=> S L7 (5A) (END# OR TERMINUS OR TERMINI)

       1378335 END#
         14259 TERMINUS
          3246 TERMINI

L9   26 L7 (5A) (END# OR TERMINUS OR TERMINI)
=> D L9 1-26 CIT AB

1. 5,512,441, Apr. 30, 1996, Quantative method for early detection of mutant alleles and diagnostic kits for carrying out the method; Zeey A. Ronai, 435/6, 18, 91.1, 91.2, 91.52; 536/24.33 [IMAGE AVAILABLE]

US PAT NO: 5,512,441 [IMAGE AVAILABLE] L9: 1 of 26

ABSTRACT:
There is disclosed a quantitative sensitive method to enable the detection of point mutations at a known site to a diagnostic kit which uses a multi step (for example, four steps) or a single step reaction. The method uses selective polymerase chain reaction (PCR) amplification of mutant test gene sequences involving first stage amplification of both mutant and wild-type sequences, first stage restriction enzyme digestion of only wild-type sequences, second stage amplification of undigested amplified fragments enriched in mutant sequences and second stage digestion of previously undigested wild-type sequences. Long and short tail primers are used in the first and second stages of amplification respectively to enable selective amplification (in the second stage) of only previously amplified material and none of the original test genomic DNA. The short tail primers are labelled with biotin and fluorescence at their respective 5' and 3' ends to enable easy detection and quantitation of mutations in the test gene via automated fluorescence readers. The use of multi steps as well as a single step reaction is disclosed. The process is exemplified with respect to its use in detecting mutations in the human K-ras gene, yet it is applicable for any given mutation in a defined site.

2. 5,496,699, Mar. 5, 1996, Detection of allele - specific mutagens; George D. Sorenson, 435/6, 91.2; 536/24.33 [IMAGE AVAILABLE]

US PAT NO: 5,496,699 [IMAGE AVAILABLE] L9: 2 of 26

ABSTRACT:
Methods are provided for detecting and quantitating gene sequences, such as mutated genes and oncogenes, in biological fluids. The fluid sample (e.g., plasma, serum, urine, etc.) is obtained, deproteinized and the DNA present in the sample is extracted. Following denaturation of the DNA, an amplification procedure, such as PCR or LCR, is conducted to amplify the mutated gene sequence.

3. 5,494,793, Feb. 27, 1996, Monomeric phthalocyanine reagents; Deborah C. Schindele, et al., 435/6, 7.1, 183; 536/24.3 [IMAGE AVAILABLE]

US PAT NO: 5,494,793 [IMAGE AVAILABLE] L9: 3 of 26

ABSTRACT:
Fluorescent and/or chromogenic reagents in which a phthalocyanine derivative is monomerically conjugated with an antigen, antibody, oligonucleotide, or nucleic acid. Methods are presented in in which greater than 90% of the phthalocyanine dyes are monomeric when conjugated. This greatly enhances their performance as detectable markers in immunoassays, nucleic acid probe assays, immunoblotting, hybridization

assays, microscopy, imaging, flow cytometry, DNA sequencing, and photodynamic therapy. For use as fluorophores, the free base phthalocyanine may or may not be metallated. Metals for fluorescent phthalocyanine include aluminum, silicon, phosphorus, gallium, germanium, cadmium, scandium, magnesium, tin, and zinc. For use as chromogens, the phthalocyanine may or may not be metallated. For use in aqueous solution, the phthalocyanine macrocycle should be derivatized with water-solubilizing substituents such as sulfonic acid, phosphate, phosphonate, hydroxy, phenoxy, amino, ammonium, or pyridinium groups. To promote disaggregation, metallation with an atom of +3 valence or higher is recommended, so that the monomer will take on an axial ligand in aqueous solution. For use in enzymatic immunoassays and enzymatically enhanced nucleic acid probe assays, the monomeric phthalocyanine derivative is conjugated via an enzyme-cleavable linkage with the antigen, antibody, oligonucleotide, or nucleic acid. Reversibly quenched embodiments are also provided in which a cleavable linkage joins a fluorescent phthalocyanine monomer with another phthalocyanine, a heavy metal, or a paramagnetic species.

4. 5,491,086, Feb. 13, 1996, Purified thermostable nucleic acid polymerase and DNA coding sequences from pyrodictium species; David H. Gelfand, et al., 435/194, 252.3, 320.1; 536/23.2, 23.7; 930/240 [IMAGE AVAILABLE]

US PAT NO: 5,491,086 [IMAGE AVAILABLE] L9: 4 of 26

ABSTRACT:
Recombinant DNA sequences encoding the DNA polymerase activity of Pyrodictium species can be used to construct recombinant vectors and transformed host cells for production of the activity. Pyrodictium enzymes for catalyzing 3'.fwdarw.5' exonuclease activity, i.e., proofreading enzymes, are also provided. The Pyrodictium enzymes are useful in DNA amplification procedures and are not irreversibly inactivated by exposure to 100.degree. C. in a polymerase chain reaction.

5. 5,474,896, Dec. 12, 1995, Nucleotide sequence encoding the enzyme I-SceI and the uses thereof; Bernard Dujon, et al., 435/6, 320.1; 935/78 [IMAGE AVAILABLE]

US PAT NO: 5,474,896 [IMAGE AVAILABLE] L9: 5 of 26

ABSTRACT:
An isolated DNA encoding the enzyme I-SceI is provided. The DNA sequence can be incorporated in cloning and expression vectors, transformed cell lines and transgenic animals. The vectors are useful in gene mapping and site-directed insertion of genes.

6. 5,466,595, Nov. 14, 1995, Calcium independent cytosolic phospholipase A2/B enzymes; Simon Jones, et al., 435/240.2, 320.1; 536/23.2 [IMAGE AVAILABLE]

US PAT NO: 5,466,595 [IMAGE AVAILABLE] L9: 6 of 26

ABSTRACT:
The invention provides a novel calcium-independent cytosolic phospholipase A.sub.2 /B enzyme, polynucleotides encoding such enzyme and methods for screening unknown compounds for anti-inflammatory activity mediated by the arachidonic acid cascade.

7. 5,427,929, Jun. 27, 1995, Method for reducing carryover contamination in an amplification procedure; Rodney M. Richards, et al., 435/91.2, 6; 935/77, 78 [IMAGE AVAILABLE]

US PAT NO: 5,427,929 [IMAGE AVAILABLE] L9: 7 of 26

ABSTRACT:
The present invention provides an efficient and economical method for reducing carryover contamination in an amplification procedure. The method of the present invention enables background caused by contaminant amplification product to be reduced or eliminated through the incorporation of at least one modification into the amplification product. The modified amplification product is readily distinguishable from the target sequence in a test sample. Prior to amplifying the target in a new test sample, the sample may be treated to selectively cleave the contaminant amplification product so that it cannot be amplified in the new sample.

8. 5,426,039, Jun. 20, 1995, Direct molecular cloning of primer extended DNA containing an alkane diol; Robert B. Wallace, et al., 435/91.2, 91.4, 91.51, 252.33 [IMAGE AVAILABLE]

US PAT NO: 5,426,039 [IMAGE AVAILABLE] L9: 8 of 26

ABSTRACT:
This invention relates to a method of cloning DNA produced by primer extension including PCR amplified, reverse transcriptase-generated or primer extended synthetic DNA. Specifically, it relates to a method in which alkane diol residue containing oligonucleotide primers are incorporated into DNA by primer extension followed by direct cloning of the target DNA. Following transformation, the host excises the alkane diol residue with its endogenous DNA repair machinery.

9. 5,422,252, Jun. 6, 1995, Simultaneous amplification of multiple targets; George T. Walker, et al., 435/91.2, 6; 935/17, 77, 78 [IMAGE

AVAILABLE]

US PAT NO: 5,422,252 [IMAGE AVAILABLE] L9: 9 of 26

ABSTRACT:
Methods for multiplex amplification of target nucleic acid sequences using a single pair of primers. Defined sequences are appended to the ends of multiple target sequences as part of the amplification reaction so that no steps in addition to amplification are required. The target sequences with the appended defined sequences need not be isolated prior to amplification. In one embodiment for coamplification of two target sequences, a sequence corresponding to a terminal segment of the first target sequence is appended to one end of the second target sequence and a sequence corresponding to a terminal segment of the second target sequence is appended to one end of the first target sequence. Amplification of the two targets then requires only a single pair of primers. Alternatively, a single defined sequence may be appended to the 5' and 3' ends of any number of selected targets. All such modified target sequences may then be amplified using a single pair of primers which hybridize to the defined end-sequences.

10. 5,420,029, May 30, 1995, Mutated thermostable nucleic acid polymerase enzyme from thermotoga maritima; David H. Gelfand, et al., 435/194; 536/23.2, 23.4; 935/10, 14 [IMAGE AVAILABLE]

US PAT NO: 5,420,029 [IMAGE AVAILABLE] L9: 10 of 26

ABSTRACT:

A purified thermostable enzyme is derived from the eubacterium Thermotoga maritima. The enzyme has a molecular weight as determined by gel electrophoresis of about 97 kilodaltons and DNA polymerase I activity. The enzyme can be produced from native or recombinant host cells and can be used with primers and nucleoside triphosphates in a temperature-cycling chain reaction where at least one nucleic acid sequence is amplified in quantity from an existing sequence.

11. 5,399,485, Mar. 21, 1995, Methods and compositions for diagnosing cat scratch disease and bacillary angiomatosis caused by Rochalimaea henselae; Russell L. Regnery, et al., 435/7.32, 6; 436/811; 530/387.1, 388.4, 389.5, 391.1, 391.3 [IMAGE AVAILABLE]

US PAT NO: 5,399,485 [IMAGE AVAILABLE] L9: 11 of 26

ABSTRACT:
The present invention relates to a method of diagnosing cat scratch disease and a method of diagnosing bacillary angiomatosis in a subject by

detecting the presence of Rochalimaea henselae or an immunogenically specific determinant thereof in the subject. Also provided by the present invention is a vaccine comprising an immunogenic amount of a nonpathogenic Rochalimaea henselae or an immunogenically specific determinant thereof and a pharmaceutically acceptable carrier.

12. 5,374,553, Dec. 20, 1994, DNA encoding a thermostable nucleic acid polymerase enzyme from thermotoga maritima; David H. Gelfand, et al., 435/252.3, 194, 252.33, 320.1; 536/23.2 [IMAGE AVAILABLE]

US PAT NO: 5,374,553 [IMAGE AVAILABLE] L9: 12 of 26

ABSTRACT:
A purified thermostable enzyme is derived from the eubacterium Thermotoga maritima. The enzyme has a molecular weight of about 97 kilodaltons and DNA polymerase I activity. The enzyme can be produced from native or recombinant host cells and can be used with primers and nucleoside triphosphates in a temperaturecycling chain reaction where at least one nucleic acid sequence is amplified in quantity from an existing sequence.

13. 5,354,668, Oct. 11, 1994, Methods for the isothermal amplification of nucleic acid molecules; Jeffrey I. Auerbach, 435/91.1, 6 [IMAGE AVAILABLE]

US PAT NO: 5,354,668 [IMAGE AVAILABLE] L9: 13 of 26

ABSTRACT:
Methods for amplifying a nucleic acid molecule which employs a single primer, and in which the amplification is performed under isothermal conditions. The invention also includes kits containing reagents for conducting the method.

14. 5,300,436, Apr. 5, 1994, Genetically modified tyrosine hydroxylase and uses thereof; Menek Goldstein, et al., 435/252.3, 190, 320.1; 536/23.2; 935/10, 14 [IMAGE AVAILABLE]

US PAT NO: 5,300,436 [IMAGE AVAILABLE] L9: 14 of 26

ABSTRACT:
Modification of the DNA encoding the enzyme tyrosine hydroxylase (TH) resulting in amino acid substitution in one of the first fifty five N-terminal residues, in particular replacing Ser-40 with Tyr or Leu, produced TH variants having substantially increased enzymatic activity upon transfection of suitable host cells. Cells transfected with the variant TH having enhanced enzymatic activity are useful for treating neurological or psychiatric disorders associated with deficient TH or dopamine, in particular Parkinson's disease, by grafting such cells into

the brain.

15. 5,276,013, Jan. 4, 1994, Conjugates of biologically stable polyfunctional molecules and polynucleotides for treating systemic lupus erythematosus; Michael J. Conrad, et al., 514/2; 424/78.02, 78.24, 78.31; 514/44, 885; 536/24.2 [IMAGE AVAILABLE]

US PAT NO: 5,276,013 [IMAGE AVAILABLE] L9: 15 of 26

ABSTRACT:
Chemically defined conjugates of biologically stable valency platform molecules, such as copolymers of D-glutamic acid and D-lysine or polyethylene glycol, and polynucleotide duplexes of at least 20 base pairs that have significant binding activity for human lupus anti-dsDNA autoantibodies. The duplexes are preferably homogeneous in length structure and are bound to the valency platform molecule via reaction between a functional group located at or proximate a terminus of each duplex and functional groups on the valency platform molecule. These conjugates are tolerogens for human systemic lupus erythematosus.

16. 5,272,082, Dec. 21, 1993, Cytotoxic T-ALL cell lines and uses therefor; Daniela Santoli, et al., 435/240.2; 424/534; 435/69.5, 70.5 [IMAGE AVAILABLE]

US PAT NO: 5,272,082 [IMAGE AVAILABLE] L9: 16 of 26

ABSTRACT:
The invention provides cytotoxic T-ALL cell lines, and modified cytotoxic T-ALL cell lines which contain a heterologous DNA sequence. The DNA sequence may encode a product capable of stabilizing or potentiating the tumoricidal activity of the cytotoxic cell lines and a product capable of controlling the growth of the cell line. Methods for use of these cell lines are also provided.

17. 5,221,610, Jun. 22, 1993, Diagnostic method and composition for early detection of HIV infection; Luc Montagnier, et al., 435/7.1, 7.92, 974; 530/350 [IMAGE AVAILABLE]

US PAT NO: 5,221,610 [IMAGE AVAILABLE] L9: 17 of 26

ABSTRACT:
Polypeptides encoded by the nef gene of Human Immunodeficiency Virus (HIV), which is the major etiological agent of Acquired Immune Deficiency Syndrome (AIDS), are identified. The polypeptides, a diagnostic method for detecting antibodies to HIV in biological fluids, a diagnostic kit for carrying out the method, and pharmaceutical compositions containing the polypeptides are described. The polypeptides are useful in viral

vaccines and for the early detection of HIV infection in humans.

18. 5,212,082, May 18, 1993, Genetically modified tyrosine hydroxylase and uses thereof; Menek Goldstein, et al., 435/190, 172.1; 935/14 [IMAGE AVAILABLE]

US PAT NO: 5,212,082 [IMAGE AVAILABLE] L9: 18 of 26

ABSTRACT:
Modification of the DNA encoding the enzyme tyrosine hydroxylase (TH) resulting in amino acid substitution in one of the first fifty five N-terminal residues, in particular replacing Ser-40 with Tyr or Leu, produced TH variants having substantially increased enzymatic activity upon transfection of suitable host cells. Cells transfected with the variant TH having enhanced enzymatic activity are useful for treating neurological or psychiatric disorders associated with deficient TH or dopamine, in particular Parkinson's disease, by grafting such cells into the brain.

19. 5,162,515, Nov. 10, 1992, Conjugates of biologically stable polymers and polynucleotides for treating systemic lupus erythematosus; Michael J. Conrad, et al., 536/26.1; 514/44, 885 [IMAGE AVAILABLE]

US PAT NO: 5,162,515 [IMAGE AVAILABLE] L9: 19 of 26

ABSTRACT:
Chemically defined conjugates of biologically stable polymers, such as copolymers of D-glutamic acid and D-lysine, and polynucleotide duplexes of at least 30 base pairs that have significant binding activity for human lupus anti-dsDNA autoantibodies. The duplexes are preferably homogeneous in length and structure and are bound to the polymer via reaction between an amino-reactive functional group located at or proximate a terminus of each duplex. These conjugates are tolerogens for human systemic lupus erythematosus.

20. 5,043,030, Aug. 27, 1991, Stab initiator; Coodly P. Ramaswamy, 149/16; 102/202.5; 149/26, 27, 28, 35, 61 [IMAGE AVAILABLE]

US PAT NO: 5,043,030 [IMAGE AVAILABLE] L9: 20 of 26

ABSTRACT:
The invention is directed to a primer/detonator acceptable for use in an automobile air bag system.

21. 4,962,037, Oct. 9, 1990, Method for rapid base sequencing in DNA and RNA; James H. Jett, et al., 435/6, 41, 75; 436/94, 175, 501, 800; 935/77, 78 [IMAGE AVAILABLE]

US PAT NO: 4,962,037 [IMAGE AVAILABLE] L9: 21 of 26

ABSTRACT:
A method is provided for the rapid base sequencing of DNA or RNA fragments wherein a single fragment of DNA or RNA is provided with identifiable bases and suspended in a moving flow stream. An exonuclease sequentially cleaves individual bases from the end of the suspended fragment. The moving flow stream maintains the cleaved bases in an orderly train for subsequent detection and identification. In a particular embodiment, individual bases forming the DNA or RNA fragments are individually tagged with a characteristic fluorescent dye. The train of bases is then excited to fluorescence with an output spectrum characteristic of the individual bases. Accordingly, the base sequence of the original DNA or RNA fragment can be reconstructed.

22. 4,959,312, Sep. 25, 1990, Full spectrum mutagenesis; Karl M. Sirotkin, 435/91.5, 91.51, 91.52, 172.1, 172.3; 935/16, 17 [IMAGE AVAILABLE]

US PAT NO: 4,959,312 [IMAGE AVAILABLE] L9: 22 of 26

ABSTRACT:

A method is disclosed for in vitro mutagenesis of a target DNA sequence which generates mutants containing a single randomly-located region in the target sequence with random substitution mutations. The method includes the production of a supply of a template for the target sequence and random primers having differing 3'--OH termini. At least two nucleotides are added randomly to the primers to produce modified random primers, some of which contain at least one mismatch with respect to the template. The modified random primers are employed with the supply of the sequence to polymerize from the 3'--OH **terminus** of the **modified** random **primer** along the template to biologically fix mutations resulting from mismatched bases and produce molecules having a double-stranded region containing a mutant strand. The molecules are transferred into the host organisms to cause at least some of the mutant strands to be replicated in the host organism to produce mutant DNA sequences. These organisms are grown into a population of clones each containing a mutant sequence. One or more clones are selected based on desired characteristics and a mutant sequence is amplified to produce a usable supply of the mutant sequence.

23. 4,808,520, Feb. 28, 1989, Labelling of oligonucleotides; Nanibhushan Dattagupta, et al., 435/6, 91.5, 91.51; 536/24.3; 935/8, 78 [IMAGE AVAILABLE]

US PAT NO: 4,808,520 [IMAGE AVAILABLE] L9: 23 of 26

ABSTRACT:
A method is provided of making an oligonucleotide which comprises hybridizing (a) a shorter fragment of the desired oligonucleotide with (b) a nucleic acid fragment longer than (a) and complementary to the desired oligonucleotide, one of (a) and (b) is linked to an organic radical which differentiates its physical properties relative to the other of (a) and (b), contacting the hybridized material with an enzyme and nucleoside triphosphates whereby the shorter fragment is extended in one direction until it is substantially coterminal with the complementary nucleic acid fragment, denaturing the hybridized material and separating lengthened (a) from (b).

24. 4,591,564, May 27, 1986, Transferase enzymes which modify the 3'-termini of ribonucleic acid and methods; Kenneth F. Watson, 435/194, 6, 91.3 [IMAGE AVAILABLE]

US PAT NO: 4,591,564 [IMAGE AVAILABLE] L9: 24 of 26

ABSTRACT:
Three ribonucleotidyl terminal transferase enzymes are disclosed which modify the 3'-termini of ribonucleic acid (RNA) molecules by the addition of ribonucleotide units using ribonucleoside triphosphates as substrates. These terminal transferase activities are distinguishable by the specific ribonucleotide (e.g. AMP, CMP, or UMP) transferred to the 3'-hydroxyl terminus of an RNA primer. Also provided is a method for the 3'-terminal modification of RNA molecules by these enzymes and sequencing of RNA from its 3'-termini. The methods provide a convenient and efficient procedure for 3'-terminal modification (homopolymer tailing) of RNA required for synthesis of complete complementary DNA (cDNA) copies or double-stranded DNA gene copies by retrovirus-associated reverse transcriptase. Using the enzymes of the invention, RNA can also be radiolabelled to very high levels for molecular hybridization.

25. 4,015,526, Apr. 5, 1977, Explosive charge; John Alan Bond, et al., 181/116; 102/331; 181/118 [IMAGE AVAILABLE]

US PAT NO: 4,015,526 [IMAGE AVAILABLE] L9: 25 of 26

ABSTRACT:
An explosive charge for use under hydrostatic pressure comprising high explosive composition in a flexible plastics container closed at one end and having, at the mouth end, a shoulder and a neck defining the container opening, the opening being sealed by a closure cap which provides a central plug to support the neck against internal distortion and an outer annular skirt which supports the neck and shoulder against

external distortion.

26. 3,631,623, Jan. 4, 1972, LASER IGNITION SYSTEM FOR FIREARMS; William G. Platt, 42/84, 106; 219/121.6 [IMAGE AVAILABLE]

US PAT NO: 3,631,623 [IMAGE AVAILABLE] L9: 26 of 26

ABSTRACT:
A laser assembly is mounted on a firearm so as to direct a laser beam through an optical system to an explosive charge contained within the chamber of said firearm. The beam may be directed to the explosive through the side of a shell or through a plastic window inserted in the end of the shell in place of the usual primer. The trigger of the firearm connects the laser assembly to a source of electrical energy to actuate the laser so that a beam of energy is discharged therefrom.
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E4	USPAT	1		HAMMOND, PATRICK E/IN
E5	USPAT	1		HAMMOND, PAUL/IN
E6	USPAT	2		HAMMOND, PAUL E/IN
E7	USPAT	1		HAMMOND, PAUL L/IN
E8	USPAT	2		HAMMOND, PAUL S/IN
E9	USPAT	1		HAMMOND, PETER/IN
E10	USPAT	2		HAMMOND, PETER GEORGE HENRY/IN
E11	USPAT	1		HAMMOND, PETER J/IN
E12	USPAT	4		HAMMOND, PETER M/IN

=> MORE

E13	USPAT	21		HAMMOND, PETER R/IN
E14	USPAT	8		HAMMOND, PETER W/IN
E15	USPAT	1		HAMMOND, PHILIP/IN
E16	USPAT	10		HAMMOND, PHILIP G/IN
E17	USPAT	1		HAMMOND, PHILIP K/IN
E18	USPAT	34		HAMMOND, PHILIP S/IN
E19	USPAT	3		HAMMOND, PHILIP W/IN
E20	USPAT	1		HAMMOND, PHILLIP G/IN
E21	USPAT	5		HAMMOND, R PHILIP/IN
E22	USPAT	1		HAMMOND, RAIFORD L/IN
E23	USPAT	1		HAMMOND, RAY L/IN
E24	USPAT	1		HAMMOND, RAYMOND F/IN

=> S E19
L1 3 "HAMMOND, PHILIP W"/IN
=> D L1 CIT AB 1-3

1. 5,232,831, Aug. 3, 1993, Nucleic acid probes to streptococcus pyogenes; Curt L. Milliman, et al., 435/6; 536/24.32; 935/78 [IMAGE AVAILABLE]

US PAT NO: 5,232,831 [IMAGE AVAILABLE] L1: 1 of 3

ABSTRACT:
Probes for the detection of Streptococcus pyogenes, which are capable of distinguishing it from related species, are provided. Methods of using these probes in hybridization assays, and hybrids formed between the

probes and complementary nucleic acids, are disclosed.

2. 5,216,143, Jun. 1, 1993, Nucleic acid probes to mycobacterium gordonae; James J. Hogan, et al., 536/24.32; 435/6, 863 [IMAGE AVAILABLE]

US PAT NO: 5,216,143 [IMAGE AVAILABLE] L1: 2 of 3

ABSTRACT:
Hybridization assay probes specific for Mycobacterium gordonae and no other Mycobacterium species.

3. 4,950,613, Aug. 21, 1990, Proteted chemiluminescent labels; Lyle J. Arnold, Jr., et al., 436/546, 501, 544; 546/102, 103, 104, 110, 169, 170 [IMAGE AVAILABLE]

US PAT NO: 4,950,613 [IMAGE AVAILABLE] L1: 3 of 3

ABSTRACT:
A method of preparing a labelled specific binding partner, such as a biological probe in the form of an antibody or oligonucleotide probe, using a protected label (the corresponding unprotected label being susceptible to inactivation, such as by hydrolysis to yield a non-chemiluminescent form of the label). The specific binding partner is linked to the label, and an adduct of the label is prepared using a protective adduct former which produces a protected label which is less susceptible to inactivation. Particularly preferred labels are the acridiniums and acridans, most preferably the former having the general structure: ##STR1## wherein the phenyl rings are optionally additionally substituted, R.sub.1 is preferably an alkyl, and R.sub.5 is an optionally substituted hydrocarbon, most preferably a phenyl moiety which is either linked to the specific binding partner, or capable of being linked thereto. Formation of the protected label is preferably an equilibrium reaction which is readily reversible, such as by dilution or oxidation of the protective adduct former. Labels useful in such a method are also disclosed.

=> E RYDER, T/IN

E#	FILE	FREQUENCY	TERM
E1	USPAT	1	RYDER, SUSAN/IN
E2	USPAT	5	RYDER, SUSAN B/IN
E3	USPAT	0 -->	RYDER, T/IN
E4	USPAT	1	RYDER, WILLIAM C/IN
E5	USPAT	1	RYDER, WILLIAM L/IN
E6	USPAT	1	RYDER, WILLIAM S/IN
E7	USPAT	1	RYDER, WILLIAM V JR/IN
E8	USPAT	1	RYDERGREN, BERTIL/IN
E9	USPAT	1	RYDESKI, JULIAN A/IN

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E10     USPAT                   1       RYDGERG, SVERKER/IN
E11     USPAT                   7       RYDGREN, GOERAN/IN
E12     USPAT                   1       RYDGREN, GOERGAN/IN
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6/28/96
8/480,472

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SYSTEM:OS  - DIALOG OneSearch
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        (c) 1996 BIOSIS
  File  72:EMBASE  1985-1996/Iss 24
        (c) 1996 Elsevier Science B.V.
  File  76:Life Sciences Collection  1982-1996/May
        (c) 1996 Cambridge Sci Abs
  File 155:MEDLINE(R)  1966-1996/AUG W4
        (c) format only 1996 Knight-Ridder Info
*File 155: Type HELP NEWS 155 for 1996 reload information
***  MEDLINE updates delayed. See HELP DELAY 155.
  File 342:Derwent Patents Citation Indx  1978-96/96C18A
        (c) 1996 Derwent Info Ltd
*File 342: MAPs of Cited/Citing Patent Numbers or Derwent Accession
Numbers are now working correctly.
  File 348:EUROPEAN PATENTS  1978-1996/JUN W3
        (c) 1996 European Patent Office
*File 348:  *** EPO is now CURRENT! ***
Fulltext is forthcoming.  See HELP NEWS 348 for more information.
  File 399:CA SEARCH(R)  1967-1996/UD=12501
        (c) 1996 American Chemical Society
*File 399: Use is subject to the terms of your user/customer agreement.
For format prices, including formats 6 & 8, see HELP RATES 399.

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Ref    Items  Index-term
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E2         7  AU=MCDONOUGH, ROBERT J.
E3         0 *AU=MCDONOUGH, S
E4         4  AU=MCDONOUGH, S.
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E12        1  AU=MCDONOUGH, STEFAN

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 2/3,AB/1     (Item 1 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)
(c) 1996 American Chemical Society. All rts. reserv.

  122073165    CA: 122(7)73165e    CONFERENCE PROCEEDING
  Application of the hybridization protection assay (HPA) to PCR
  AUTHOR(S): Nelson, Norman C.; McDonough, Sherrol H.
  LOCATION: Gen-Probe Inc., San Diego, CA, 92121, USA
  JOURNAL: Polymerase Chain React.  EDITOR: Mullis, Kary B. (Ed), Ferre,
Francois (Ed), Gibbs, Richard A (Ed),  DATE: 1994  PAGES: 151-61  CODEN:
60HKA7  LANGUAGE: English  PUBLISHER: Birkhaeuser,Boston, Mass


 2/3,AB/2     (Item 2 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)
(c) 1996 American Chemical Society. All rts. reserv.

  122002776    CA: 122(1)2776u    PATENT
  Probes and primers for detection of human immunodeficiency virus type 1
in biological samples
  INVENTOR(AUTHOR): McDonough, Sherrol H.; Ryder, Thomas B.; Yang, Yeasing
  LOCATION: USA
  ASSIGNEE: Gen-Probe Incorp.
  PATENT: European Pat. Appl. ; EP 617132 A2  DATE: 940928
  APPLICATION: EP 94302196 (940328) *US 40745 (930326)
  PAGES: 69 pp.  CODEN: EPXXDW  LANGUAGE: English  CLASS: C12Q-001/70A;
C12Q-001/68B  DESIGNATED COUNTRIES: AT; BE; CH; DE; DK; ES; FR; GB; IT; LI;
NL; SE


 2/3,AB/3     (Item 3 from file: 399)
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DIALOG(R)File 399:CA SEARCH(R)

120263055 CA: 120(21)263055a PATENT
Nucleic acid sequence amplification without temperature cycling
INVENTOR(AUTHOR): Mcdonough, Sherrol H.; Kacian, Daniel L.; Dattagupta, Nanibhushan; Mcallister, Diane L.; Hammond, Philip W.; Ryder, Thomas B.
LOCATION: USA
ASSIGNEE: Gen-Probe Incorp.
PATENT: PCT International ; WO 9403472 A1 DATE: 940217
APPLICATION: WO 93US7138 (930728) *US 925405 (920804)
PAGES: 48 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C07H-021/04A; C12P-019/34B; C12Q-001/68B DESIGNATED COUNTRIES: AU; CA; JP; KR; NO

2/3,AB/4 (Item 4 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

120129018 CA: 120(11)129018n PATENT
RNA sequence amplification method, composition, and kit
INVENTOR(AUTHOR): Kacian, Daniel Louis; Mcallister, Diane Lisa; Mcdonough, Sherrol Hoffa; Dattagupta, Nanibhushan
LOCATION: USA
ASSIGNEE: Gen-Probe Inc.
PATENT: PCT International ; WO 9322461 A1 DATE: 931111
APPLICATION: WO 93US4015 (930429) *US 879686 (920506)
PAGES: 50 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C12Q-001/68A; C12P-019/34B; C07H-015/12B DESIGNATED COUNTRIES: AU; CA; FI; JP; KR; NO

2/3,AB/5 (Item 5 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

115131045 CA: 115(13)131045j JOURNAL
Rapid and quantitative detection of enzymically amplified HIV-1 DNA using chemiluminescent oligonucleotide probes
AUTHOR(S): Ou, Chin Yih; McDonough, Sherrol H.; Cabanas, Debra; Ryder, Thomas B.; Harper, Mary; Moore, Jennifer; Schochetman, Gerald
LOCATION: Cent. Infect. Dis., U. S. Dep. Health and Hum. Serv., Atlanta, GA, USA
JOURNAL: AIDS Res. Hum. Retroviruses DATE: 1990 VOLUME: 6 NUMBER: 11
PAGES: 1323-9 CODEN: ARHRE7 ISSN: 0889-2229 LANGUAGE: English

2/3,AB/6 (Item 6 from file: 399)

DIALOG(R)File 399:CA SEARCH(R)

111093479 CA: 111(11)93479m PATENT
Preparation and use of nucleic acid probes for detection and/or quantitation of nonviral organisms by hybridization with unique sequences on rRNA
INVENTOR(AUTHOR): Hogan, James John; Smith, Richard Dana; Kop, Jo Ann; McDonough, Sherrol Hoffa
LOCATION: USA
ASSIGNEE: Gen-Probe, Inc.
PATENT: PCT International ; WO 8803957 A1 DATE: 880602
APPLICATION: WO 87US3009 (871124) *US 934244 (861124) *US 83542 (870807)
PAGES: 212 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C12Q-001/68A; C07H-021/00B DESIGNATED COUNTRIES: AU; DK; FI; JP; KR; NO; US

2/3,AB/7 (Item 7 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

105109938 CA: 105(13)109938z DISSERTATION
Transcription of human cytomegalovirus in permissively infected human fibroblasts
AUTHOR(S): McDonough, Sherrol Hoffa
LOCATION: Univ. California, San Diego, CA, USA
DATE: 1985 PAGES: 158 pp. CODEN: DABBBA LANGUAGE: English CITATION: Diss. Abstr. Int. B 1986, 46(7), 2210 AVAIL: Univ. Microfilms Int., Order No. DA8517908

2/3,AB/8 (Item 8 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

103136995 CA: 103(17)136995f JOURNAL
Cell-related sequences in the DNA genome of human cytomegalovirus strain AD169
AUTHOR(S): Shaw, Sydney B.; Rasmussen, Richard D.; McDonough, Sherrol H.; Staprans, Silvija I.; Vacquier, Judith P.; Spector, Deborah H.
LOCATION: Dep. Biol., Univ. California, San Diego, La Jolla, CA, 92093, USA
JOURNAL: J. Virol. DATE: 1985 VOLUME: 55 NUMBER: 3 PAGES: 843-8
CODEN: JOVIAM ISSN: 0022-538X LANGUAGE: English

2/3,AB/9 (Item 9 from file: 399)

DIALOG(R)File 399:CA SEARCH(R)

102143964 CA: 102(17)143964c JOURNAL
Organization and expression of the repeats at the termini and L-S junction of human cytomegalovirus strain AD169
AUTHOR(S): Spector, Deborah H.; McDonough, Sherrol H.; Staprans, Silvija I.; Tamashiro, Joyce C.; Friedmann, Theodore; Filpula, David
LOCATION: Univ. California, San Diego, La Jolla, CA, 92093, USA
JOURNAL: UCLA Symp. Mol. Cell. Biol., New Ser. DATE: 1984 VOLUME: 21
NUMBER: Herpesvirus PAGES: 441-54 CODEN: USMBD6 ISSN: 0735-9543
LANGUAGE: English

2/3,AB/10 (Item 10 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

102126456 CA: 102(15)126456w JOURNAL
Analysis of the major transcripts encoded by the long repeat of human cytomegalovirus strain AD169
AUTHOR(S): McDonough, Sherrol H.; Staprans, Silvija I.; Spector, Deborah H.
LOCATION: Dep. Biol., Univ. California, La Jolla, CA, 92093, USA
JOURNAL: J. Virol. DATE: 1985 VOLUME: 53 NUMBER: 3 PAGES: 711-18
CODEN: JOVIAM ISSN: 0022-538X LANGUAGE: English

2/3,AB/11 (Item 11 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

98173973 CA: 98(21)173973w JOURNAL
Transcription in human fibroblasts permissively infected by human cytomegalovirus strain AD169
AUTHOR(S): McDonough, Sherrol H.; Spector, Deborah H.
LOCATION: Dep. Biol., Univ. California, La Jolla, CA, 92093, USA
JOURNAL: Virology DATE: 1983 VOLUME: 125 NUMBER: 1 PAGES: 31-46
CODEN: VIRLAX ISSN: 0042-6822 LANGUAGE: English
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E10        8  AU=KACIAN, DANIEL LOUIS
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>>>Duplicate detection is not supported for File 348.

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 5/3,AB/1     (Item 1 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)
(c) 1996 American Chemical Society. All rts. reserv.

  124108943    CA: 124(9)108943c    PATENT
  Nucleic acid sequence amplification methods that use an RNA intermediate
as a template for synthesis of a DNA amplification product
  INVENTOR(AUTHOR): Kacian, Daniel L.; Fultz, Timothy J.
  LOCATION: USA
  ASSIGNEE: Gen-Probe Incorporated
  PATENT: United States ; US 5480784 A  DATE: 960102
  APPLICATION: US 550837 (900710) *US 379501 (890711)
  PAGES: 51 pp. Cont.-in-part of U.S. Ser. No. 379,501, abandoned.  CODEN:
USXXAM  LANGUAGE: English  CLASS: 435091210; C12P-019/34A
```

5/3,AB/2 (Item 2 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

124024872 CA: 124(3)24872r PATENT
Highly-purified recombinant reverse transcriptase
INVENTOR(AUTHOR): Kacian, Daniel Louis; Riggs, Michael Garth; Putnam, James Garfield
LOCATION: USA
ASSIGNEE: Gen-Probe Inc.
PATENT: PCT International ; WO 9527047 A2 DATE: 951012
APPLICATION: WO 95US4092 (950329) *US 221804 (940401)
PAGES: 63 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C12N-009/12A; C12N-015/48B; C07K-014/14B DESIGNATED COUNTRIES: AU; CA; JP; KR

5/3,AB/3 (Item 3 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

124002523 CA: 124(1)2523a PATENT
Isothermal strand displacement nucleic acid amplification
INVENTOR(AUTHOR): Dattagupta, Nanibhushan; Stull, Paul Douglas; Spingola, Marc; Kacian, Daniel Louis
LOCATION: USA
ASSIGNEE: Gen-Probe Incorp.
PATENT: PCT International ; WO 9525180 A1 DATE: 950921
APPLICATION: WO 95US3339 (950314) *US 215081 (940316)
PAGES: 48 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C12Q-001/68A
DESIGNATED COUNTRIES: AU; CA; JP; KR

5/3,AB/4 (Item 4 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

123250112 CA: 123(19)250112d PATENT
Method for suppressing inhibition of enzyme-mediated reactions by ionic detergents.
INVENTOR(AUTHOR): Kacian, Daniel Louis; McAllistar, Diane Lisa
LOCATION: USA
ASSIGNEE: Gen-Probe Inc.
PATENT: European Pat. Appl. ; EP 671473 A1 DATE: 950913
APPLICATION: EP 95103520 (950310) *US 212131 (940310)
PAGES: 20 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C12Q-001/00A; C12Q-001/68B; C12P-019/34B DESIGNATED COUNTRIES: AT; BE; CH; DE; DK; ES;

FR; GB; IT; LI; LU; NL; SE

5/3,AB/5 (Item 5 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

123079027 CA: 123(7)79027d PATENT
Method for extracting nucleic acids from a wide range of organisms.
INVENTOR(AUTHOR): Clark, Kathleen A.; Kacian, Daniel L.
LOCATION: USA
ASSIGNEE: Gen-Probe Inc.
PATENT: European Pat. Appl. ; EP 657530 A2 DATE: 950614
APPLICATION: EP 94308809 (941129) *US 158940 (931129)
PAGES: 19 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C12N-001/06A; C12N-015/10B DESIGNATED COUNTRIES: AT; BE; CH; DE; DK; ES; FR; GB; IT; LI; LU; NL; SE

5/3,AB/6 (Item 6 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

123002726 CA: 123(1)2726y PATENT
Enhancement of oligonucleotide inhibition of protein production, cell proliferation, and/or multiplication of infectious disease pathogens
INVENTOR(AUTHOR): Dattagupta, Nanibhushan; Sridhar, C. Nagaraja; Kacian, Daniel L.
LOCATION: USA
ASSIGNEE: Gen-Probe Inc.
PATENT: PCT International ; WO 9503406 A2 DATE: 950202
APPLICATION: WO 94US8334 (940719) *US 93800 (930719)
PAGES: 57 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C12N-015/11A; C12N-009/00B; A61K-031/70B; A61K-048/00B DESIGNATED COUNTRIES: AU; CA; JP; KR DESIGNATED REGIONAL: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LU; MC ; NL; PT; SE

5/3,AB/7 (Item 7 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

122257957 CA: 122(21)257957w PATENT
Determination of the ability of an oligonucleotide to hybridize to a target nucleic acid by an oligonucleotide screening assay.
INVENTOR(AUTHOR): Nelson, Norman C.; Kacian, Daniel L.
LOCATION: USA

ASSIGNEE: Gen-Probe Incorp.
PATENT: European Pat. Appl. ; EP 639648 A1 DATE: 950222
APPLICATION: EP 94305271 (940719) *US 94577 (930719)
PAGES: 21 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C12Q-001/68A
DESIGNATED COUNTRIES: AT; BE; CH; DE; DK; ES; FR; GB; IT; LI; LU; NL; SE

5/3,AB/8 (Item 8 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

121225849 CA: 121(19)225849a PATENT
Method to prepare nucleic acids from a biological sample using low pH and acid protease
INVENTOR(AUTHOR): Kacian, Daniel L.; Nunomura, Kiyotada
LOCATION: USA
ASSIGNEE: Gen-Probe Incorp.
PATENT: European Pat. Appl. ; EP 611157 A2 DATE: 940817
APPLICATION: EP 94300971 (940210) *US 15729 (930210)
PAGES: 16 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C12P-019/34A; C12Q-001/68B; C07H-001/08B DESIGNATED COUNTRIES: AT; BE; CH; DE; DK; ES; FR; GB; IT; LI; LU; NL; SE

5/3,AB/9 (Item 9 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

120263055 CA: 120(21)263055a PATENT
Nucleic acid sequence amplification without temperature cycling
INVENTOR(AUTHOR): Mcdonough, Sherrol H.; Kacian, Daniel L.; Dattagupta, Nanibhushan; Mcallister, Diane L.; Hammond, Philip W.; Ryder, Thomas B.
LOCATION: USA
ASSIGNEE: Gen-Probe Incorp.
PATENT: PCT International ; WO 9403472 A1 DATE: 940217
APPLICATION: WO 93US7138 (930728) *US 925405 (920804)
PAGES: 48 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C07H-021/04A; C12P-019/34B; C12Q-001/68B DESIGNATED COUNTRIES: AU; CA; JP; KR; NO

5/3,AB/10 (Item 10 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

120129018 CA: 120(11)129018n PATENT
RNA sequence amplification method, composition, and kit
INVENTOR(AUTHOR): Kacian, Daniel Louis; Mcallister, Diane Lisa;

Mcdonough, Sherrol Hoffa; Dattagupta, Nanibhushan
LOCATION: USA
ASSIGNEE: Gen-Probe Inc.
PATENT: PCT International ; WO 9322461 A1 DATE: 931111
APPLICATION: WO 93US4015 (930429) *US 879686 (920506)
PAGES: 50 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C12Q-001/68A; C12P-019/34B; C07H-015/12B DESIGNATED COUNTRIES: AU; CA; FI; JP; KR; NO

5/3,AB/11 (Item 11 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

120101272 CA: 120(9)101272s PATENT
Preparation of nucleic acid from mononuclear cells
INVENTOR(AUTHOR): Ryder, Thomas B.; Kacian, Daniel Louis
LOCATION: USA
ASSIGNEE: Gen-Probe Inc.
PATENT: European Pat. Appl. ; EP 574227 A2 DATE: 931215
APPLICATION: EP 93304440 (930608) *US 895587 (920608)
PAGES: 16 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C12Q-001/68A; C12Q-001/70B DESIGNATED COUNTRIES: AT; BE; CH; DE; DK; ES; FR; GB; IT; LI; LU; NL; SE

5/3,AB/12 (Item 12 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

120049576 CA: 120(5)49576c PATENT
Preparation of nucleic acid from white blood cells
INVENTOR(AUTHOR): Ryder, Thomas B.; Kacian, Daniel Louis
LOCATION: USA
ASSIGNEE: Gen-Probe Inc.
PATENT: European Pat. Appl. ; EP 574267 A2 DATE: 931215
APPLICATION: EP 93304542 (930611) *US 898785 (920612)
PAGES: 17 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C12Q-001/68A
DESIGNATED COUNTRIES: AT; BE; CH; DE; DK; ES; FR; GB; IT; LI; LU; NL; SE

5/3,AB/13 (Item 13 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

115176729 CA: 115(17)176729b PATENT
Nucleic acid sequence autocatalytic amplification methods
INVENTOR(AUTHOR): Kacian, Daniel Louis; Fultz, Timothy J.

LOCATION: USA
ASSIGNEE: Gen-Probe, Inc.
PATENT: European Pat. Appl. ; EP 408295 A2 DATE: 910116
APPLICATION: EP 90307503 (900710) *US 379501 (890711)
PAGES: 74 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C12Q-001/68A
DESIGNATED COUNTRIES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LI; LU; NL; SE

5/3,AB/14 (Item 14 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

114097544 CA: 114(11)97544p JOURNAL
Chemiluminescent DNA probes: a comparison of the acridinium ester and dioxetane detection systems and their use in clinical diagnostic assays
AUTHOR(S): Nelson, Norman C.; Kacian, Daniel L.
LOCATION: Gen-Probe, Inc., San Diego, CA, 92121, USA
JOURNAL: Clin. Chim. Acta DATE: 1990 VOLUME: 194 NUMBER: 1 PAGES: 73-90 CODEN: CCATAR ISSN: 0009-8981 LANGUAGE: English

5/3,AB/15 (Item 15 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

111074379 CA: 111(9)74379n PATENT
Method and kit for preparation of mucoid secretions for bacterial assays and concentration of bacterial species in biological specimens
INVENTOR(AUTHOR): Kacian, Daniel Louis
LOCATION: USA
ASSIGNEE: Gen-Probe, Inc.
PATENT: European Pat. Appl. ; EP 285439 A2 DATE: 881005
APPLICATION: EP 88302941 (880331) *US 33435 (870401) *US 173612 (880325)
PAGES: 9 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C12Q-001/68A; C12Q-001/44B; G01N-033/50B DESIGNATED COUNTRIES: AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; LU; NL; SE

5/3,AB/16 (Item 16 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

102058659 CA: 102(7)58659n JOURNAL
Purification of plasminogen activator from Rous sarcoma virus-infected chick embryo fibroblast culture medium
AUTHOR(S): Kacian, Daniel L.; Harvey, Richard C.

LOCATION: Dep. Pathol. Lab. Med., Univ. Pennsylvania, Philadelphia, PA, 19104, USA
JOURNAL: Arch. Biochem. Biophys. DATE: 1985 VOLUME: 236 NUMBER: 1
PAGES: 354-69 CODEN: ABBIA4 ISSN: 0003-9861 LANGUAGE: English

5/3,AB/17 (Item 17 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

88002069 CA: 88(1)2069v JOURNAL
Methods for assaying reverse transcriptase
AUTHOR(S): Kacian, Daniel L.
LOCATION: Coll. Physicians Surg., Columbia Univ., New York, N. Y.
JOURNAL: Methods Virol. DATE: 1977 VOLUME: 6, PAGES: 143-84 CODEN: MTVIAM LANGUAGE: English

5/3,AB/18 (Item 18 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

83002522 CA: 83(1)2522j CONFERENCE PROCEEDING
Isolation and synthesis of human genes
AUTHOR(S): Marks, Paul A.; Rifkind, Richard A.; Spiegelman, Sol; Kacian, Daniel L.; Bank, Arthur
LOCATION: Coll. Physicians Surg., Columbia Univ., New York, N. Y.
JOURNAL: Birth Defects, Proc. Int. Conf., 4th EDITOR: Motulsky, Arno G. (Ed), Lenz, W (Ed), DATE: 1974 PAGES: 73-80 CODEN: 30MCA9 LANGUAGE: English MEETING DATE: 73 PUBLISHER: Excerpta Med.,Amsterdam, Neth

5/3,AB/19 (Item 19 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

75148760 CA: 75(25)148760s DISSERTATION
Characterization of the Q.beta. virus-associated 6S RNA
AUTHOR(S): Kacian, Daniel L.
LOCATION: Univ. Illinois, Urbana, Ill.
DATE: 1970 PAGES: 115 pp. CODEN: DABSAQ LANGUAGE: English CITATION: Diss. Abstr. Int. B 1971, 31(12)(Pt. 1), 7460-1 AVAIL: Univ. Microfilms, Ann Arbor, Mich., Order No. 71-14,818
?E AU=DATTAGUPTA, N

Ref Items Index-term

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E1         1  AU=DATTAGUPTA, M. C.
E2         1  AU=DATTAGUPTA, MAHUA
E3         0 *AU=DATTAGUPTA, N
E4        42  AU=DATTAGUPTA, N.
E5        60  AU=DATTAGUPTA, NANIBHUSHAN
E6         1  AU=DATTAGUPTA, NANIBUSHAN
E7         1  AU=DATTAGUPTA, R.
E8         1  AU=DATTAGUPTA, S
E9        61  AU=DATTAGUPTA, S.
E10        2  AU=DATTAGUPTA, SAGUNA
E11        1  AU=DATTAGUPTA, SUMITRA
E12       13  AU=DATTAGUPTA, SUSHANTA

          Enter P or PAGE for more
?S E5 OR E6

               60  AU=DATTAGUPTA, NANIBHUSHAN
                1  AU=DATTAGUPTA, NANIBUSHAN
      S6       61  AU="DATTAGUPTA, NANIBHUSHAN" OR AU="DATTAGUPTA,
                   NANIBUSHAN"
?RD

>>>Duplicate detection is not supported for File 342.
>>>Duplicate detection is not supported for File 348.

>>>Records from unsupported files will be retained in the RD set.
...examined 50 records  (50)
...completed examining records
      S7       61  RD (unique items)
?T S7/3,AB/1-61

>>>No matching display code(s) found in file(s): 342, 399

 7/3,AB/1     (Item 1 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)
(c) 1996 American Chemical Society. All rts. reserv.

  124002523    CA: 124(1)2523a    PATENT
  Isothermal strand displacement nucleic acid amplification
  INVENTOR(AUTHOR): Dattagupta, Nanibhushan; Stull, Paul Douglas; Spingola,
Marc; Kacian, Daniel Louis
  LOCATION: USA
  ASSIGNEE: Gen-Probe Incorp.
  PATENT: PCT International ; WO 9525180 A1  DATE: 950921
  APPLICATION: WO 95US3339 (950314) *US 215081 (940316)
  PAGES: 48 pp.  CODEN: PIXXD2  LANGUAGE: English  CLASS: C12Q-001/68A
  DESIGNATED COUNTRIES: AU; CA; JP; KR
```

7/3,AB/2 (Item 2 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

123027193 CA: 123(3)27193k PATENT
Enhancement of nucleic acid amplification method employing DNA polymerase and RNA polymerase at constant temperature
INVENTOR(AUTHOR): Ryder, Thomas B.; Billyard, Elizabeth R.; Dattagupta, Nanibhushan
LOCATION: USA
ASSIGNEE: Gen-Probe Incorp.
PATENT: PCT International ; WO 9503430 A1 DATE: 950202
APPLICATION: WO 94US8307 (940720) *US 97262 (930723)
PAGES: 51 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C12Q-001/68A
DESIGNATED COUNTRIES: AU; CA; JP; KR

7/3,AB/3 (Item 3 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

123002726 CA: 123(1)2726y PATENT
Enhancement of oligonucleotide inhibition of protein production, cell proliferation, and/or multiplication of infectious disease pathogens
INVENTOR(AUTHOR): Dattagupta, Nanibhushan; Sridhar, C. Nagaraja; Kacian, Daniel L.
LOCATION: USA
ASSIGNEE: Gen-Probe Inc.
PATENT: PCT International ; WO 9503406 A2 DATE: 950202
APPLICATION: WO 94US8334 (940719) *US 93800 (930719)
PAGES: 57 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C12N-015/11A; C12N-009/00B; A61K-031/70B; A61K-048/00B DESIGNATED COUNTRIES: AU; CA; JP; KR DESIGNATED REGIONAL: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LU; MC ; NL; PT; SE

7/3,AB/4 (Item 4 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

120263055 CA: 120(21)263055a PATENT
Nucleic acid sequence amplification without temperature cycling
INVENTOR(AUTHOR): Mcdonough, Sherrol H.; Kacian, Daniel L.; Dattagupta, Nanibhushan; Mcallister, Diane L.; Hammond, Philip W.; Ryder, Thomas B.
LOCATION: USA

ASSIGNEE: Gen-Probe Incorp.
PATENT: PCT International ; WO 9403472 A1 DATE: 940217
APPLICATION: WO 93US7138 (930728) *US 925405 (920804)
PAGES: 48 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C07H-021/04A; C12P-019/34B; C12Q-001/68B DESIGNATED COUNTRIES: AU; CA; JP; KR; NO

7/3,AB/5 (Item 5 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

120129018 CA: 120(11)129018n PATENT
RNA sequence amplification method, composition, and kit
INVENTOR(AUTHOR): Kacian, Daniel Louis; Mcallister, Diane Lisa; Mcdonough, Sherrol Hoffa; Dattagupta, Nanibhushan
LOCATION: USA
ASSIGNEE: Gen-Probe Inc.
PATENT: PCT International ; WO 9322461 A1 DATE: 931111
APPLICATION: WO 93US4015 (930429) *US 879686 (920506)
PAGES: 50 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C12Q-001/68A; C12P-019/34B; C07H-015/12B DESIGNATED COUNTRIES: AU; CA; FI; JP; KR; NO

7/3,AB/6 (Item 6 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

119263642 CA: 119(25)263642u JOURNAL
A transcriptionally amplified DNA probe assay with ligatable probes and immunochemical detection
AUTHOR(S): Carpenter, William R.; Schutzbank, Ted E.; Tevere, Vincent J.; Tocyloski, Kenneth R.; Dattagupta, Nanibushan; Yeung, Kwok K.
LOCATION: Diagn. Div., Miles Inc., Tarrytown, NY, 10591, USA
JOURNAL: Clin. Chem. (Washington, D. C.) DATE: 1993 VOLUME: 39
NUMBER: 9 PAGES: 1934-8 CODEN: CLCHAU ISSN: 0009-9147 LANGUAGE: English

7/3,AB/7 (Item 7 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

119181156 CA: 119(17)181156z PATENT
Fluorescent label
INVENTOR(AUTHOR): Dattagupta, Nanibhushan; Koecher, Juergen
LOCATION: USA
ASSIGNEE: Miles Inc.

PATENT: European Pat. Appl. ; EP 527433 A1 DATE: 930217
APPLICATION: EP 92113393 (920806) *US 744555 (910813)
PAGES: 17 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C07H-021/00A; C12Q-001/68B DESIGNATED COUNTRIES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE

7/3,AB/8 (Item 8 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

118185109 CA: 118(19)185109p PATENT
Novel amplification method for polynucleotide assays
INVENTOR(AUTHOR): Dattagupta, Nanibhushan; Sullivan, Elizabeth C.
LOCATION: USA
ASSIGNEE: Miles Inc.
PATENT: European Pat. Appl. ; EP 530526 A1 DATE: 930310
APPLICATION: EP 92113394 (920806) *US 744548 (910813)
PAGES: 7 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C12Q-001/68A
DESIGNATED COUNTRIES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE

7/3,AB/9 (Item 9 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

115107787 CA: 115(11)107787g PATENT
Nucleic acid amplification employing transcribable hairpin probe
INVENTOR(AUTHOR): Dattagupta, Nanibhushan
LOCATION: USA
ASSIGNEE: Molecular Diagnostics, Inc.
PATENT: European Pat. Appl. ; EP 427074 A2 DATE: 910515
APPLICATION: EP 90120652 (901027) *US 433947 (891109) *US 569992 (900823)
PAGES: 23 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C12Q-001/68A; C12P-019/34B; C07H-021/04; C12Q-001/70; G01N-033/53 DESIGNATED COUNTRIES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LI; LU; NL; SE

7/3,AB/10 (Item 10 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

115086778 CA: 115(9)86778n PATENT
Bacteriophage promoter-containing hybridization probes for transcriptional amplification of target sequences
INVENTOR(AUTHOR): Dattagupta, Nanibhushan

LOCATION: USA
ASSIGNEE: Molecular Diagnostics, Inc.
PATENT: European Pat. Appl. ; EP 427073 A2 DATE: 910515
APPLICATION: EP 90120650 (901027) *US 434372 (891109) *US 569991 (900823)
PAGES: 15 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C12Q-001/68A; C07H-021/04B; C12P-019/34B DESIGNATED COUNTRIES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LI; LU; NL; SE

7/3,AB/11 (Item 11 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

114078227 CA: 114(9)78227w PATENT
Photochemical nucleic acid-labeling reagent having a polyalkylamine spacer
INVENTOR(AUTHOR): Dattagupta, Nanibhushan; Albarella, James P.
LOCATION: USA
ASSIGNEE: Molecular Diagnostics, Inc.
PATENT: United States ; US 4950744 A DATE: 900821
APPLICATION: US 27384 (870318) *US 690336 (850110)
PAGES: 12 pp. Cont.-in-part of U.S. Ser. No. 690,336, abandoned. CODEN: USXXAM LANGUAGE: English CLASS: 536027000; C07H-019/00A; C12Q-001/68B; C12Q-001/00B

7/3,AB/12 (Item 12 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

113148381 CA: 113(17)148381x PATENT
Assay of nucleotide sequences by amplification and hybridization
INVENTOR(AUTHOR): Dattagupta, Nanibhushan
LOCATION: USA
ASSIGNEE: Molecular Diagnostics, Inc.
PATENT: European Pat. Appl. ; EP 374665 A2 DATE: 900627
APPLICATION: EP 89122786 (891209) *US 289638 (881223)
PAGES: 17 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C12Q-001/68A
DESIGNATED COUNTRIES: AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; LU; NL; SE

7/3,AB/13 (Item 13 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

111150062 CA: 111(17)150062w PATENT
Nucleic acid sequence determination by hybridization probe and its use in

the identification of microorganisms and prokaryotic or eukaryotic DNA and in clinical diagnosis
INVENTOR(AUTHOR): Dattagupta, Nanibhushan; Rabin, Daniel; Rae, Peter; Huguenel, Edward
LOCATION: USA
ASSIGNEE: Molecular Diagnostics, Inc.
PATENT: European Pat. Appl. ; EP 281927 A2 DATE: 880914
APPLICATION: EP 88103221 (880303) *US 24643 (870311)
PAGES: 31 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C12Q-001/68A
DESIGNATED COUNTRIES: CH; DE; ES; FR; GB; GR; IT; LI; NL; SE

7/3,AB/14 (Item 14 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

111020501 CA: 111(3)20501c PATENT
Cells labeled with multiple fluorophores bound to a nucleic acid carrier
INVENTOR(AUTHOR): Dattagupta, Nanibhushan; Kamarck, Michael E.
LOCATION: USA
ASSIGNEE: Molecular Diagnostics, Inc.
PATENT: United States ; US 4824775 A DATE: 890425
APPLICATION: US 688493 (850103)
PAGES: 6 pp. CODEN: USXXAM LANGUAGE: English CLASS: 435004000; C12Q-001/00A; G01N-033/554B

7/3,AB/15 (Item 15 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

111018837 CA: 111(3)18837y PATENT
Gene amplification with immobilized primer
INVENTOR(AUTHOR): Dattagupta, Nanibhushan
LOCATION: USA
ASSIGNEE: Molecular Diagnostics, Inc.
PATENT: European Pat. Appl. ; EP 297379 A2 DATE: 890104
APPLICATION: EP 88109769 (880620) *US 68671 (870630)
PAGES: 7 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C12Q-001/68A
DESIGNATED COUNTRIES: DE; FR; GB

7/3,AB/16 (Item 16 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

110227886 CA: 110(25)227886g JOURNAL

Rapid identification of microorganisms by nucleic acid hybridization after labeling the test sample
AUTHOR(S): Dattagupta, Nanibhushan; Rae, Peter M. M.; Huguenel, Edward D. ; Carlson, Elizabeth; Lyga, Andrew; Shapiro, Jeffery A.; Albarella, James P.
LOCATION: Miles Res. Cent., Mol. Diagn., Inc., West Haven, CT, 06516, USA
JOURNAL: Anal. Biochem. DATE: 1989 VOLUME: 177 NUMBER: 1 PAGES: 85-9
CODEN: ANBCA2 ISSN: 0003-2697 LANGUAGE: English

7/3,AB/17 (Item 17 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

110131791 CA: 110(15)131791w PATENT
Method using protein-coated metal probe for the detection of nucleic acid hybrids
INVENTOR(AUTHOR): Dattagupta, Nanibhushan; Busse, Wolf Dieter
LOCATION: USA
ASSIGNEE: Molecular Diagnostics, Inc.
PATENT: European Pat. Appl. ; EP 267521 A2 DATE: 880518
APPLICATION: EP 87116142 (871103) *US 929958 (861112)
PAGES: 9 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C12Q-001/68A; G01N-033/543B; G01N-033/545B DESIGNATED COUNTRIES: AT; BE; CH; DE; ES; FR; GB; IT; LI; LU; NL; SE

7/3,AB/18 (Item 18 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

109019653 CA: 109(3)19653f JOURNAL
Detection of biotinylated nucleic acid hybrids by antibody-coated gold colloid
AUTHOR(S): Tomlinson, Stephen; Lyga, Andrew; Huguenel, Edward; Dattagupta, Nanibhushan
LOCATION: Miles Res. Cent., Mol. Diagnostics Inc., West Haven, CT, 06516, USA
JOURNAL: Anal. Biochem. DATE: 1988 VOLUME: 171 NUMBER: 1 PAGES: 217-22 CODEN: ANBCA2 ISSN: 0003-2697 LANGUAGE: English

7/3,AB/19 (Item 19 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

108183297 CA: 108(21)183297t PATENT

Method and kit for rapid detection of nucleic acid sequences in a sample by labeling the sample
INVENTOR(AUTHOR): Dattagupta, Nanibhushan; Rae, Peter M. M.; Rabin, Daniel U.; Huguenel, Edward D.
LOCATION: USA
ASSIGNEE: Molecular Diagnostics, Inc.
PATENT: European Pat. Appl. ; EP 235726 A2 DATE: 870909
APPLICATION: EP 87102577 (870224) *US 836378 (860305) *US 943006 (861229)
PAGES: 29 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C12Q-001/68A; G01N-033/532B; C07H-021/00; C07C-143/68; C07D-209/48; C07C-093/04; C07D-495/04 DESIGNATED COUNTRIES: AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; NL; SE

7/3,AB/20 (Item 20 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

108164418 CA: 108(19)164418s PATENT
Preparation and use of reagents for a single probe solution-phase hybridization assay for the detection of a nucleotide sequence, and kits containing the reagents
INVENTOR(AUTHOR): Dattagupta, Nanibhushan
LOCATION: USA
ASSIGNEE: Molecular Diagnostics, Inc.
PATENT: European Pat. Appl. ; EP 237833 A2 DATE: 870923
APPLICATION: EP 87102576 (870224) *US 836360 (860305) *US 927613 (861114)
PAGES: 50 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C12Q-001/68A; G01N-033/535B; C07H-021/00 DESIGNATED COUNTRIES: AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; NL; SE

7/3,AB/21 (Item 21 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

108146733 CA: 108(17)146733m PATENT
Rapid DNA test and kit for microbes using genomic DNA in sample and probes
INVENTOR(AUTHOR): Dattagupta, Nanibhushan; Rae, Peter M. M.
LOCATION: USA
ASSIGNEE: Molecular Diagnostics, Inc.
PATENT: European Pat. Appl. ; EP 235727 A2 DATE: 870909
APPLICATION: EP 87102580 (870224) *US 836787 (860306)
PAGES: 7 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C12Q-001/68A; C12Q-001/04 DESIGNATED COUNTRIES: AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; NL; SE

7/3,AB/22 (Item 22 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

108109217 CA: 108(13)109217a PATENT
Eukaryotic genomic DNA dot-blot hybridization method and test kit
INVENTOR(AUTHOR): Dattagupta, Nanibhushan; Rabin, Daniel
LOCATION: USA
ASSIGNEE: Molecular Diagnostics, Inc.
PATENT: European Pat. Appl. ; EP 228075 A2 DATE: 870708
APPLICATION: EP 86117978 (861223) *US 815974 (860103) *US 845221 (860328)
PAGES: 47 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C12Q-001/68A; C07H-021/00 DESIGNATED COUNTRIES: DE; FR; GB; GR; IT; SE

7/3,AB/23 (Item 23 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

107214504 CA: 107(23)214504u PATENT
Radioactive labeling of proteins with nucleosides or nucleotides
INVENTOR(AUTHOR): Dattagupta, Nanibhushan
LOCATION: USA
ASSIGNEE: Molecular Diagnostics, Inc.
PATENT: United States ; US 4692509 A DATE: 870908
APPLICATION: US 675373 (841127)
PAGES: 3 pp. CODEN: USXXAM LANGUAGE: English CLASS: 530303000; A61K-043/00A; A61N-005/12B

7/3,AB/24 (Item 24 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

107055321 CA: 107(7)55321p PATENT
Assays utilizing labeled nucleic acid probes
INVENTOR(AUTHOR): Dattagupta, Nanibhushan
LOCATION: USA
ASSIGNEE: Molecular Diagnostics, Inc.
PATENT: United States ; US 4670380 A DATE: 870602
APPLICATION: US 612984 (840523)
PAGES: 5 pp. CODEN: USXXAM LANGUAGE: English CLASS: 435006000; C12Q-001/68A; C12N-015/00B

7/3,AB/25 (Item 25 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

106172474 CA: 106(21)172474f PATENT
Chemiluminescence prolonged with nitrogen compounds for use in immunoassays, nucleotide probes, and test kits, and a device
INVENTOR(AUTHOR): Dattagupta, Nanibhushan; Clemens, Anton H.
LOCATION: USA
ASSIGNEE: Molecular Diagnostics, Inc.
PATENT: European Pat. Appl. ; EP 210449 A2 DATE: 870204
APPLICATION: EP 86108890 (860630) *US 753734 (850710) *US 753739 (850710) *US 753749 (850710) *US 840636 (860320)
PAGES: 100 pp. CODEN: EPXXDW LANGUAGE: English CLASS: G01N-033/52A; G01N-033/53B; C12Q-001/68B; G01N-033/58; C12Q-001/66
DESIGNATED COUNTRIES: AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE

7/3,AB/26 (Item 26 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

106172449 CA: 106(21)172449b PATENT
Labeling of oligonucleotides for primer-extension polynucleotide synthesis and hybridization assay
INVENTOR(AUTHOR): Dattagupta, Nanibhushan; Knowles, William
LOCATION: USA
ASSIGNEE: Molecular Diagnostics, Inc.
PATENT: European Pat. Appl. ; EP 194545 A2 DATE: 860917
APPLICATION: EP 86102766 (860303) *US 712481 (850315) *US 808871 (851218)
PAGES: 17 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C07H-021/00A; C07H-019/073; C07H-019/10 DESIGNATED COUNTRIES: AT; BE; CH; DE; FR; GB; IT ; LI; LU; NL; SE

7/3,AB/27 (Item 27 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

106172364 CA: 106(21)172364v JOURNAL
A simple method for generation of high specific activity oligonucleotide probes
AUTHOR(S): Dattagupta, Nanibhushan; Rabin, Daniel; Michaud, Gertrude; Rae, Peter M. M.
LOCATION: Mol. Diagn., Inc., West Haven, CT, 06516, USA
JOURNAL: BioTechniques DATE: 1987 VOLUME: 5 NUMBER: 1 PAGES: 38-9, 42-3 CODEN: BTNQDO ISSN: 0736-6205 LANGUAGE: English

7/3,AB/28 (Item 28 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

106149047 CA: 106(19)149047k JOURNAL
Anthracycline antibiotics. Interaction with DNA and nucleosomes and inhibition of DNA synthesis
AUTHOR(S): Fritzsche, Hartmut; Waehnert, Ulla; Chaires, Jonathan B.; Dattagupta, Nanibhushan; Schlessinger, Fabiola Bleiberg; Crothers, Donald M.
LOCATION: Cent. Inst. Microbiol. Exp. Ther., Ger. Acad. Sci., DDR-6900, Jena, Ger. Dem. Rep.
JOURNAL: Biochemistry DATE: 1987 VOLUME: 26 NUMBER: 7 PAGES: 1996-2000 CODEN: BICHAW ISSN: 0006-2960 LANGUAGE: English

7/3,AB/29 (Item 29 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

106081222 CA: 106(11)81222f PATENT
Fast and specific immobilization of nucleic acids to solid supports
INVENTOR(AUTHOR): Dattagupta, Nanibhushan
LOCATION: USA
ASSIGNEE: Molecular Diagnostics, Inc.
PATENT: European Pat. Appl. ; EP 192197 A2 DATE: 860827
APPLICATION: EP 86101883 (860214) *US 704129 (850222)
PAGES: 23 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C07H-021/00A; C12Q-001/68B DESIGNATED COUNTRIES: AT; BE; CH; DE; FR; GB; IT; LI; NL; SE

7/3,AB/30 (Item 30 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

106046883 CA: 106(7)46883a PATENT
Preparation and use of specifically iodinated nucleic acid probes
INVENTOR(AUTHOR): Dattagupta, Nanibhushan; Knowles, William
LOCATION: USA
ASSIGNEE: Molecular Diagnostics, Inc.
PATENT: European Pat. Appl. ; EP 198207 A1 DATE: 861022
APPLICATION: EP 86103106 (860308) *US 714306 (850321)
PAGES: 15 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C12Q-001/68A; C07H-021/00B DESIGNATED COUNTRIES: AT; BE; CH; DE; FR; GB; IT; LI; NL; SE

7/3,AB/31 (Item 31 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

106015445 CA: 106(3)15445e PATENT
Solution-phase dual hybridization assay for detecting polynucleotide sequences
INVENTOR(AUTHOR): Dattagupta, Nanibhushan
LOCATION: USA
ASSIGNEE: Molecular Diagnostics, Inc.
PATENT: European Pat. Appl. ; EP 192168 A2 DATE: 860827
APPLICATION: EP 86101725 (860211) *US 704130 (850222)
PAGES: 28 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C12Q-001/68A; C07H-021/00 DESIGNATED COUNTRIES: AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE

7/3,AB/32 (Item 32 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

105187151 CA: 105(21)187151b PATENT
Photochemical method of labelling nucleic acids for detection in hybridization assays
INVENTOR(AUTHOR): Dattagupta, Nanibhushan
LOCATION: USA
ASSIGNEE: Molecular Diagnostics, Inc.
PATENT: European Pat. Appl. ; EP 187332 A2 DATE: 860716
APPLICATION: EP 85116199 (851218) *US 690336 (850110)
PAGES: 39 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C12Q-001/68A; G01N-033/532 DESIGNATED COUNTRIES: AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE

7/3,AB/33 (Item 33 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

105094127 CA: 105(11)94127h PATENT
Large scale production of DNA probes
INVENTOR(AUTHOR): Dattagupta, Nanibhushan; Rae, Peter; Crothers, Donald; Barnett, Thomas
LOCATION: USA
ASSIGNEE: Molecular Diagnostics, Inc.
PATENT: European Pat. Appl. ; EP 184056 A2 DATE: 860611
APPLICATION: EP 85114561 (851116) *US 675386 (841127)

PAGES: 13 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C07H-021/00A
DESIGNATED COUNTRIES: AT; BE; CH; DE; FR; GB; IT; LI; NL; SE

7/3,AB/34 (Item 34 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

104164843 CA: 104(19)164843u PATENT
Nucleic acid probe coupled to radioactive label
INVENTOR(AUTHOR): Dattagupta, Nanibhushan
LOCATION: USA
ASSIGNEE: Molecular Diagnostics, Inc.
PATENT: European Pat. Appl. ; EP 164586 A1 DATE: 851218
APPLICATION: EP 85105792 (850511) *US 612983 (840523)
PAGES: 15 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C12Q-001/68A; G01N-033/534; G01N-033/60 DESIGNATED COUNTRIES: DE; FR; GB

7/3,AB/35 (Item 35 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

104031369 CA: 104(5)31369x PATENT
Nucleic acid-protein conjugate
INVENTOR(AUTHOR): Dattagupta, Nanibhushan; Knowles, William J.; Marchesi, Vincent T.; Crothers, Donald M.
LOCATION: USA
ASSIGNEE: Molecular Diagnostics, Inc.
PATENT: European Pat. Appl. ; EP 154884 A2 DATE: 850918
APPLICATION: EP 85102130 (850227) *US 588858 (840312)
PAGES: 20 pp. CODEN: EPXXDW LANGUAGE: English CLASS: G01N-033/532A; C12Q-001/68B; G01N-033/574B; G01N-033/50B DESIGNATED COUNTRIES: AT; BE; CH ; DE; FR; GB; IT; LI; LU; NL; SE

7/3,AB/36 (Item 36 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

104003146 CA: 104(1)3146d PATENT
Immobilized nucleic acid-containing probes
INVENTOR(AUTHOR): Dattagupta, Nanibhushan
LOCATION: USA
ASSIGNEE: Molecular Diagnostics, Inc.
PATENT: European Pat. Appl. ; EP 152886 A2 DATE: 850828
APPLICATION: EP 85101407 (850211) *US 582503 (840222)

PAGES: 17 pp. CODEN: EPXXDW LANGUAGE: English CLASS: G01N-033/543A; C12Q-001/68B; G01N-033/548 DESIGNATED COUNTRIES: CH; DE; FR; GB; IT; LI; NL; SE

7/3,AB/37 (Item 37 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

103138092 CA: 103(17)138092h PATENT
Nucleic acid probe, test method and reagent system for detecting a polynucleotide sequence and antibody for this method
INVENTOR(AUTHOR): Dattagupta, Nanibhushan; Rae, Peter M. M.; Knowles, William J.; Crothers, Donald M.
LOCATION: USA
ASSIGNEE: Molecular Diagnostics, Inc.
PATENT: European Pat. Appl. ; EP 147665 A1 DATE: 850710
APPLICATION: EP 84114536 (841130) *US 560462 (831212) *US 662858 (841019)
PAGES: 41 pp. CODEN: EPXXDW LANGUAGE: English CLASS: G01N-033/50A; G01N-033/531B; C12Q-001/68B DESIGNATED COUNTRIES: AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE

7/3,AB/38 (Item 38 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

102163361 CA: 102(19)163361g PATENT
Labelled nucleic acid probes and adducts for their preparation
INVENTOR(AUTHOR): Dattagupta, Nanibhushan; Crothers, Donald M.
LOCATION: USA
ASSIGNEE: Molecular Diagnostics, Inc.
PATENT: European Pat. Appl. ; EP 131830 A1 DATE: 850123
APPLICATION: EP 84107624 (840702) *US 513932 (830714) *US 611668 (840518)
PAGES: 25 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C12Q-001/68A; G01N-033/52B DESIGNATED COUNTRIES: AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE

7/3,AB/39 (Item 39 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

102109397 CA: 102(13)109397k PATENT
Immobilized nucleic acid probe and solid support for nucleic acids
INVENTOR(AUTHOR): Dattagupta, Nanibhushan; Crothers, Donald M.
LOCATION: USA

ASSIGNEE: Molecular Diagnostics, Inc.
PATENT: European Pat. Appl. ; EP 130523 A2 DATE: 850109
APPLICATION: EP 84107266 (840625) *US 511064 (830705) *US 611667 (840518)
PAGES: 17 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C12Q-001/68A; G01N-033/548; G01N-033/547 DESIGNATED COUNTRIES: CH; DE; FR; GB; IT; LI; NL; SE

7/3,AB/40 (Item 40 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

102092537 CA: 102(11)92537f PATENT
Testing DNA samples for particular nucleotide sequences
INVENTOR(AUTHOR): Dattagupta, Nanibhushan; Rae, Peter M. M.; Crothers, Donald M.
LOCATION: USA
ASSIGNEE: Molecular Diagnostics, Inc.
PATENT: European Pat. Appl. ; EP 130515 A2 DATE: 850109
APPLICATION: EP 84107248 (840625) *US 511063 (830705)
PAGES: 27 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C12Q-001/68A
DESIGNATED COUNTRIES: DE; FR; GB

7/3,AB/41 (Item 41 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

102072488 CA: 102(9)72488n JOURNAL
Kinetics of the daunomycin-DNA interaction
AUTHOR(S): Chaires, Jonathan B.; Dattagupta, Nanibhushan; Crothers, Donald M.
LOCATION: Med. Cent., Univ. Mississippi, Jackson, MS, 392116-4505, USA
JOURNAL: Biochemistry DATE: 1985 VOLUME: 24 NUMBER: 2 PAGES: 260-7
CODEN: BICHAW ISSN: 0006-2960 LANGUAGE: English

7/3,AB/42 (Item 42 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

98046365 CA: 98(7)46365z JOURNAL
Binding of daunomycin to calf thymus nucleosomes
AUTHOR(S): Chaires, Jonathan B.; Dattagupta, Nanibhushan; Crothers, Donald M.
LOCATION: Dep. Chem., Yale Univ., New Haven, CT, 06511, USA
JOURNAL: Biochemistry DATE: 1983 VOLUME: 22 NUMBER: 2 PAGES: 284-92

CODEN: BICHAW ISSN: 0006-2960 LANGUAGE: English

7/3,AB/43 (Item 43 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

97140451 CA: 97(17)140451a JOURNAL
Orientation of nucleosomes in the 30 nm chromatin fiber
AUTHOR(S): Yabuki, Hiroko; Dattagupta, Nanibhushan; Crothers, Donald M.
LOCATION: Dep. Chem., Yale Univ., New Haven, CT, 06511, USA
JOURNAL: Biochemistry DATE: 1982 VOLUME: 21 NUMBER: 20 PAGES: 5015-20
CODEN: BICHAW ISSN: 0006-2960 LANGUAGE: English

7/3,AB/44 (Item 44 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

97066075 CA: 97(9)66075n JOURNAL
Studies on interaction of anthracycline antibiotics and deoxyribonucleic acid: equilibrium binding studies on the interaction of daunomycin with deoxyribonucleic acid
AUTHOR(S): Chaires, Jonathan B.; Dattagupta, Nanibhushan; Crothers, Donald M.
LOCATION: Dep. Chem., Yale Univ., New Haven, CT, 06511, USA
JOURNAL: Biochemistry DATE: 1982 VOLUME: 21 NUMBER: 17 PAGES: 3933-40
CODEN: BICHAW ISSN: 0006-2960 LANGUAGE: English

7/3,AB/45 (Item 45 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

97066074 CA: 97(9)66074m JOURNAL
Studies on the interaction of anthracycline antibiotics and deoxyribonucleic acid: geometry of intercalation of iremycin and daunomycin
AUTHOR(S): Fritzsche, Hartmut; Triebel, Hans; Chaires, Jonathan B.; Dattagupta, Nanibhushan; Crothers, Donald M.
LOCATION: Cent. Inst. Microbiol. Exp. Therapy, Ger. Acad. Sci., DDR-6900, Jena, Ger. Dem. Rep.
JOURNAL: Biochemistry DATE: 1982 VOLUME: 21 NUMBER: 17 PAGES: 3940-6
CODEN: BICHAW ISSN: 0006-2960 LANGUAGE: English

7/3,AB/46 (Item 46 from file: 399)

DIALOG(R)File 399:CA SEARCH(R)

97065920 CA: 97(9)65920x JOURNAL
Selfassociation of daunomycin
AUTHOR(S): Chaires, Jonathan B.; Dattagupta, Nanibhushan; Crothers, Donald M.
LOCATION: Dep. Chem., Yale Univ., New Haven, CT, 06511, USA
JOURNAL: Biochemistry DATE: 1982 VOLUME: 21 NUMBER: 17 PAGES: 3927-32
CODEN: BICHAW ISSN: 0006-2960 LANGUAGE: English

7/3,AB/47 (Item 47 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

96064402 CA: 96(9)64402x JOURNAL
Unfolding of 175-base-pair nucleosomes
AUTHOR(S): Schlessinger, Fabiola B.; Dattagupta, Nanibhushan; Crothers, Donald M.
LOCATION: Dep. Chem., Yale Univ., New Haven, CT, 06511, USA
JOURNAL: Biochemistry DATE: 1982 VOLUME: 21 NUMBER: 4 PAGES: 664-9
CODEN: BICHAW ISSN: 0006-2960 LANGUAGE: English

7/3,AB/48 (Item 48 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

95127680 CA: 95(15)127680p JOURNAL
Conversion of B DNA between solution and fiber conformations
AUTHOR(S): Mandelkern, Marshal; Dattagupta, Nanibhushan; Crothers, Donald M.
LOCATION: Dep. Chem., Yale Univ., New Haven, CT, 06511, USA
JOURNAL: Proc. Natl. Acad. Sci. U. S. A. DATE: 1981 VOLUME: 78
NUMBER: 7 PAGES: 4294-8 CODEN: PNASA6 ISSN: 0027-8424 LANGUAGE: English

7/3,AB/49 (Item 49 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

95110349 CA: 95(13)110349q JOURNAL
Solution structural studies of the silver(I)-DNA complex
AUTHOR(S): Dattagupta, Nanibhushan; Crothers, Donald M.
LOCATION: Dep. Chem., Yale Univ., New Haven, CT, 06511, USA

JOURNAL: Nucleic Acids Res. DATE: 1981 VOLUME: 9 NUMBER: 12 PAGES: 2971-85 CODEN: NARHAD ISSN: 0305-1048 LANGUAGE: English

7/3,AB/50 (Item 50 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

95055019 CA: 95(7)55019e JOURNAL
Neocarzinostatin chromophore binds to deoxyribonucleic acid by intercalation
AUTHOR(S): Povirk, Lawrence F.; Dattagupta, Nanibhushan; Warf, Benjamin C.; Goldberg, Irving H.
LOCATION: Dep. Pharmacol., Harvard Med. Sch., Boston, MA, 02115, USA
JOURNAL: Biochemistry DATE: 1981 VOLUME: 20 NUMBER: 14 PAGES: 4007-14
CODEN: BICHAW ISSN: 0006-2960 LANGUAGE: English

7/3,AB/51 (Item 51 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

95001621 CA: 95(1)1621b JOURNAL
Carcinogen-induced alteration of DNA structure
AUTHOR(S): Hogan, Michael E.; Dattagupta, Nanibhushan; Whitlock, James P., Jr.
LOCATION: Sch. Med., Stanford Univ., Stanford, CA, 94305, USA
JOURNAL: J. Biol. Chem. DATE: 1981 VOLUME: 256 NUMBER: 9 PAGES: 4504-13 CODEN: JBCHA3 ISSN: 0021-9258 LANGUAGE: English

7/3,AB/52 (Item 52 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

94077012 CA: 94(11)77012d JOURNAL
Copper(II).bleomycin, iron(III).bleomycin, and copper(II).phleomycin: comparative study of deoxyribonucleic acid binding
AUTHOR(S): Povirk, Lawrence F.; Hogan, Michael; Dattagupta, Nanibhushan; Buechner, Matthew
LOCATION: Dep. Mol. Biophys., Yale Univ., New Haven, CT, 06511, USA
JOURNAL: Biochemistry DATE: 1981 VOLUME: 20 NUMBER: 3 PAGES: 665-70
CODEN: BICHAW ISSN: 0006-2960 LANGUAGE: English

7/3,AB/53 (Item 53 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

94001202 CA: 94(1)1202v JOURNAL
Interaction of netropsin and distamycin with deoxyribonucleic acid: electric dichroism study
AUTHOR(S): Dattagupta, Nanibhushan; Hogan, Michael; Crothers, Donald M.
LOCATION: Dep. Chem., Yale Univ., New Haven, CT, 06511, USA
JOURNAL: Biochemistry DATE: 1980 VOLUME: 19 NUMBER: 26 PAGES: 5998-6005 CODEN: BICHAW ISSN: 0006-2960 LANGUAGE: English

7/3,AB/54 (Item 54 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

92106159 CA: 92(13)106159y JOURNAL
Unfolding of nucleosomes by ethidium binding
AUTHOR(S): Wu, Hen-Ming; Dattagupta, Nanibhushan; Hogan, Michael; Crothers, Donald M.
LOCATION: Dep. Chem., Yale Univ., New Haven, CT, 06520, USA
JOURNAL: Biochemistry DATE: 1980 VOLUME: 19 NUMBER: 4 PAGES: 626-34
CODEN: BICHAW ISSN: 0006-2960 LANGUAGE: English

7/3,AB/55 (Item 55 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

91119084 CA: 91(15)119084z JOURNAL
Structural changes of nucleosomes in low-salt concentrations
AUTHOR(S): Wu, Hen-Ming; Dattagupta, Nanibhushan; Hogan, Michael; Crothers, Donald M.
LOCATION: Dep. Chem., Yale Univ., New Haven, CT, 06520, USA
JOURNAL: Biochemistry DATE: 1979 VOLUME: 18 NUMBER: 18 PAGES: 3960-5
CODEN: BICHAW ISSN: 0006-2960 LANGUAGE: English

7/3,AB/56 (Item 56 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

90048271 CA: 90(7)48271z JOURNAL
Binding of bleomycin to DNA: intercalation of the bithiazole rings
AUTHOR(S): Povirk, Lawrence F.; Hogan, Michael; Dattagupta, Nanibhushan
LOCATION: Dep. Mol. Biophys. Biochem., Yale Univ., New Haven, Conn.
JOURNAL: Biochemistry DATE: 1979 VOLUME: 18 NUMBER: 1 PAGES: 96-101
CODEN: BICHAW ISSN: 0006-2960 LANGUAGE: English

7/3,AB/57 (Item 57 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

83038975 CA: 83(5)38975y JOURNAL
Interactions of heteroaromatic compounds with nucleic acids. 2. Influence of substituents on the base and sequence specificity of intercalating ligands
AUTHOR(S): Mueller, Werner; Buenemann, Hans; Dattagupta, Nanibhushan
LOCATION: Ges. Molekularbiol. Forsch. m.b.H., Stoeckheim, Ger.
JOURNAL: Eur. J. Biochem. DATE: 1975 VOLUME: 54 NUMBER: 1 PAGES: 279-91 CODEN: EJBCAI LANGUAGE: English

7/3,AB/58 (Item 58 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

82094376 CA: 82(15)94376v JOURNAL
Interaction of 4,5-dibromo-2,7-di(acetatomercuri)fluorescein with DNAs of different base composition
AUTHOR(S): Dattagupta, Nanibhushan; Buenemann, Hans; Mueller, Werner
LOCATION: Ges. Molekularbiol. Forsch. m.b.H., Stoeckheim/Braunschweig, Ger.
JOURNAL: Biochim. Biophys. Acta DATE: 1975 VOLUME: 378 NUMBER: 1 PAGES: 44-53 CODEN: BBACAQ LANGUAGE: English

7/3,AB/59 (Item 59 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

82017172 CA: 82(4)17172y JOURNAL
Reactive copolymers from acrylamide and p-nitrophenyl acrylate
AUTHOR(S): Eigel, Antonin; Buenemann, Hans; Dattagupta, Nanibhushan
LOCATION: Ges. Molekularbiol. Forsch. m.b.H., Stoeckheim/Braunschweig, Ger.
JOURNAL: Makromol. Chem. DATE: 1974 VOLUME: 175 NUMBER: 6 PAGES: 1847-53 CODEN: MACEAK LANGUAGE: German

7/3,AB/60 (Item 60 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

80067553 CA: 80(13)67553c JOURNAL
Binding and specificity of 3,6-bis-(acetatomercurimethyldioxane) to DNA of different base composition
AUTHOR(S): Buenemann, Hans; Dattagupta, Nanibhushan
LOCATION: Ges. Molekularbiol. Forsch. m.b.H., Stockheim/Brunswick, Ger.
JOURNAL: Biochim. Biophys. Acta DATE: 1973 VOLUME: 331 NUMBER: 3
PAGES: 341-8 CODEN: BBACAQ LANGUAGE: English

7/3,AB/61 (Item 61 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

79005971 CA: 79(2)5971h JOURNAL
New type of polymeric carrier for immobilization of biologically specific molecules
AUTHOR(S): Dattagupta, Nanibhushan; Buenemann, Hans
LOCATION: Ges. Molekularbiol. Forsch. m.b.H., Stoeckheim/Brunswick, Ger.
JOURNAL: J. Polym. Sci., Polym. Lett. Ed. DATE: 1973 VOLUME: 11
NUMBER: 3 PAGES: 189-92 CODEN: JPYBAN LANGUAGE: English
?E AU=MCALLISTER, D

Ref	Items	Index-term
E1	1	AU=MCALLISTER, CRAIG
E2	1	AU=MCALLISTER, CYNTHIA
E3	0	*AU=MCALLISTER, D
E4	7	AU=MCALLISTER, D.
E5	6	AU=MCALLISTER, D. J.
E6	2	AU=MCALLISTER, D. L.
E7	2	AU=MCALLISTER, D.C.
E8	9	AU=MCALLISTER, D.E.
E9	3	AU=MCALLISTER, D.L.
E10	1	AU=MCALLISTER, DAVID
E11	2	AU=MCALLISTER, DAVID F.
E12	13	AU=MCALLISTER, DAVID L.

Enter P or PAGE for more
?P

Ref	Items	Index-term
E13	1	AU=MCALLISTER, DAVID R.
E14	2	AU=MCALLISTER, DECKER G., JR.
E15	2	AU=MCALLISTER, DEVERE R.
E16	3	AU=MCALLISTER, DIANE L.
E17	1	AU=MCALLISTER, DIANE LISA

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E18        1  AU=MCALLISTER, DIANE R.
E19        1  AU=MCALLISTER, DON E.
E20        1  AU=MCALLISTER, DONALD J.
E21        1  AU=MCALLISTER, DOUGLAS
E22        3  AU=MCALLISTER, DOUGLAS J.
E23        1  AU=MCALLISTER, DOUGLAS JOHN
E24        1  AU=MCALLISTER, E.

          Enter P or PAGE for more
?S E16 OR E17

               3  AU=MCALLISTER, DIANE L.
               1  AU=MCALLISTER, DIANE LISA
      S8       4  AU="MCALLISTER, DIANE L." OR AU="MCALLISTER, DIANE LISA"
?T S8/3,AB/1-4

>>>No matching display code(s) found in file(s): 342, 399

 8/3,AB/1     (Item 1 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)
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  123027192    CA: 123(3)27192j    PATENT
  Nucleic acid probes for Ureaplasma
  INVENTOR(AUTHOR): Hogan, James J.; Mcallister, Diane L.; Gordon, Patricia
; Hammond, Philip W.
  LOCATION: USA
  ASSIGNEE: Gen-Probe Incorp.
  PATENT: European Pat. Appl. ; EP 639649 A2  DATE: 950222
  APPLICATION: EP 94306083 (940818) *US 109037 (930818)
  PAGES: 81 pp.  CODEN: EPXXDW  LANGUAGE: English  CLASS: C12Q-001/68A
  DESIGNATED COUNTRIES: AT; BE; CH; DE; DK; ES; FR; GB; IT; LI; LU; NL; SE


 8/3,AB/2     (Item 2 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)
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  120263055    CA: 120(21)263055a    PATENT
  Nucleic acid sequence amplification without temperature cycling
  INVENTOR(AUTHOR): Mcdonough, Sherrol H.; Kacian, Daniel L.; Dattagupta,
Nanibhushan; Mcallister, Diane L.; Hammond, Philip W.; Ryder, Thomas B.
  LOCATION: USA
  ASSIGNEE: Gen-Probe Incorp.
  PATENT: PCT International ; WO 9403472 A1  DATE: 940217
  APPLICATION: WO 93US7138 (930728) *US 925405 (920804)
  PAGES: 48 pp.  CODEN: PIXXD2  LANGUAGE: English  CLASS: C07H-021/04A;
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C12P-019/34B; C12Q-001/68B DESIGNATED COUNTRIES: AU; CA; JP; KR; NO

8/3,AB/3 (Item 3 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

120129018 CA: 120(11)129018n PATENT
RNA sequence amplification method, composition, and kit
INVENTOR(AUTHOR): Kacian, Daniel Louis; Mcallister, Diane Lisa; Mcdonough, Sherrol Hoffa; Dattagupta, Nanibhushan
LOCATION: USA
ASSIGNEE: Gen-Probe Inc.
PATENT: PCT International ; WO 9322461 A1 DATE: 931111
APPLICATION: WO 93US4015 (930429) *US 879686 (920506)
PAGES: 50 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C12Q-001/68A; C12P-019/34B; C07H-015/12B DESIGNATED COUNTRIES: AU; CA; FI; JP; KR; NO

8/3,AB/4 (Item 4 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

111167536 CA: 111(19)167536b JOURNAL
Effects of hypophysectomy and the insulin-like and anti-insulin pituitary peptides on carbohydrate metabolism in yellow Avy/A (BALB/c .times. VY)F1 hybrid mice
AUTHOR(S): Salem, Mohammed A. M.; Lewis, Urban J.; Haro, Luis S.; Kishi, Kurajiro; McAllister, Diane L.; Seavey, Boyd K.; Bee, Gary; Wolff, George L.
LOCATION: Whittier Inst. Diabetes Endocrinol., Scripps Mem. Hosp., La Jolla, CA, 92037, USA
JOURNAL: Proc. Soc. Exp. Biol. Med. DATE: 1989 VOLUME: 191 NUMBER: 4
PAGES: 408-19 CODEN: PSEBAA ISSN: 0037-9727 LANGUAGE: English

?S PROMOTER(W)PRIMER?

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           83205  PRIMER?
      S9      47  PROMOTER(W)PRIMER?
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>>>Duplicate detection is not supported for File 342.
>>>Duplicate detection is not supported for File 348.

>>>Records from unsupported files will be retained in the RD set.
...completed examining records

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?T S10/3,AB/1-34

>>>No matching display code(s) found in file(s): 342, 399

10/3,AB/1 (Item 1 from file: 55)
DIALOG(R)File 55:BIOSIS PREVIEWS(R)

13004989 BIOSIS Number: 99004989
Identification of promoter in the 5'-flanking region of the E. coli thioredoxin-linked thiol peroxidase gene: Evidence for the existence of oxygen-related transcriptional regulatory protein
Kim H-K; Kin S-J; Lee J-W; Lee J-W; Cha M-K; Kim I-H
Dep. Genet. Eng., Pai Chai Univ., 439-6 Doma 2-dong, Seo Gu, Taejon 302-735, South Korea
Biochemical and Biophysical Research Communications 221 (3). 1996. 641-646.
Full Journal Title: Biochemical and Biophysical Research Communications
ISSN: 0006-291X
Language: ENGLISH
Print Number: Biological Abstracts Vol. 102 Iss. 001 Ref. 004989
E. coli thiol peroxidase (Tpx) linked to the thioredoxin as an in vivo thiol regenerating system acts as antioxidant enzyme removing peroxides and H-2O-2. In order to elucidate the mechanism regulating tpx gene expression in E. coli in response to oxygen stress, we made 5' progressive deletions of upstream region from tpx gene, and fused to lacZ gene. LacZ activity was increased 6-fold by oxygen stress and inverted repeat sequence located between -47 and -33 nt was proven to be essential for the oxygen response of tpx promoter. Primer extension experiment and analysis of upstream sequence revealed transcription start point, -10, and -35 regions, which are in good agreements with the consensus sequences recognized by E-sigma-70. Northern hybridization showed that expression of tpx gene is regulated at the transcriptional level. DNA binding assays using invented repeat sequence including -35 region provides preliminary evidence that expression of tpx requires additional transcriptional factor in response to oxygen stress.

10/3,AB/2 (Item 2 from file: 55)
DIALOG(R)File 55:BIOSIS PREVIEWS(R)

12190156 BIOSIS Number: 98790156
Carbon catabolite repression of phenol degradation in Pseudomonas putida is mediated by the inhibition of the activator protein PhlR
Mueller C; Petruschka L; Cuypers H; Buchhardt G; Herrmann H
Inst. fuer Genetik Biochemie, E.M. Arndt-Univ., Jahnstr. 15a, D-17487

Greifswald, Germany
Journal of Bacteriology 178 (7). 1996. 2030-2036.
Full Journal Title: Journal of Bacteriology
ISSN: 0021-9193
Language: ENGLISH
Print Number: Biological Abstracts Vol. 101 Iss. 011 Ref. 157348

Enzymes involved in (methyl)phenol degradation of Pseudomonas putida H are encoded by the catabolic operon (phlA-L) on plasmid pPGH1. Transcription of this operon by the sigma-54 (RpoN)-containing RNA polymerase is positively controlled by the gene product of the divergently transcribed phlR in response to the availability of the respective substrate. Additionally, phenol degradation is subject to carbon catabolite repression induced by organic acids (e.g., succinate, lactate, and acetate) or carbohydrates (e.g., glucose and gluconate). Analysis of lacZ fusion to the catabolic promoter and quantified primer extension experiments indicate that carbon catabolite repression also occurs at the transcriptional level of the catabolic operon. In this study, it is furthermore shown that carbon catabolite repression is a negative control. Titration of the postulated negative controlling factor was exclusively observed when extra copies of functional phlR gene were present in the cell. We therefore conclude that PhlR is the target and that carbon catabolite repression of phenol degradation occurs by interfering with the activating function of PhlR.

10/3,AB/3 (Item 3 from file: 55)
DIALOG(R)File 55:BIOSIS PREVIEWS(R)

11477825 BIOSIS Number: 98077825
Non-radioactive generic HLA-DQB21 genotyping by the reverse dot-blot hybridization and the sandwich method
Kim T-G; Lim B-U; Jun T-Y; Han H
Dep. Microbiol., Catholic Univ. Med. Coll., Seoul, South Korea
Journal of the Korean Society for Microbiology 29 (5). 1994. 517-523.
Full Journal Title: Journal of the Korean Society for Microbiology
ISSN: 0253-3162
Language: KOREAN
Print Number: Biological Abstracts Vol. 099 Iss. 004 Ref. 048235

Dot-blot hybridization on PCR(Polymerase Chain Reaction) products with SSOs (Sequence-Specific Oligonucleotides) have been widely used for HLA class II genotyping. Although SSOs could discriminate one base pair difference between two alleles, major problems with this method is that it requires a large number of specific probes and many separate hybridization procedures. It is not practical in the case of HLA typing because the number of alleles is too high. For the more convenient genotyping, various reverse dot-blot hybridization methods have been reported. But the direct binding of oligonucleotides to the membrane is generally not efficient,

some modifications have been previously presented:poly dT-tailing, and tandemly ligated SSO polymer. We carried out two new technical trials to improve the reverse dot-blot hybridization. First, we synthesized oligonucleotides(37bp) which contained both sequences(U-19mer primer) specific for polycloning site of pT7 Blue plasmid at the 3' end as a primer and SSOs(18bp) at the 5' end as a probe. This "probe-primer" and T7 promoter primer were used for PCR amplification using the pT7 Blue plasmid as a target and then the PCR products (158bp) were denatured and directly dotted on nylon membrane. This immobilized SSOs binded efficiently to the membrane, showed no cross hybridization with HLA class II sequences, and were stable at room temperature for more than six months. Second, the sandwich method was used for the nonradioactive detection. Digoxigenin labeled common probe was mixed with the PCR products which were denatured by heat before hybridization, and used for nonradioactive detection of reverse dot-blot hybridization. This reverse dot-blot hybridization were applied to generic HLA-DQB1 genotyping, and successfully tested on 5 Homozygous Typing Cells from the Histocompatibility Workshop. Using 6 immobilized SSOs for DQB1, the following generic specificities could be defined: DQB1*02, 03, 04, 05 and 06. This reverse dot-blot hybridization was used to generic DQB1 genotyping on 107 normal Koreans. The distribution of DQB1 phenotype was found as 17.8% in 02, 47.7% in 03, 15.9% in 04, 33.6 % in 05 and 55.1% in 06.

10/3,AB/4 (Item 4 from file: 55)
DIALOG(R)File 55:BIOSIS PREVIEWS(R)

10895212 BIOSIS Number: 97095212
Sequence analysis of PER-1 extended-spectrum beta-lactamase from Pseudomonas aeruginosa and comparison with class A beta-lactamases
Nordmann P; Naas T
Serv. Microbiol., Hopital Raymond Poincare, 104 Bd Raymond Poincare, 92380 Garches, FRA
Antimicrobial Agents and Chemotherapy 38 (1). 1994. 104-114.
Full Journal Title: Antimicrobial Agents and Chemotherapy
ISSN: 0066-4804
Language: ENGLISH
Print Number: Biological Abstracts Vol. 097 Iss. 005 Ref. 062717
We have determined the nucleotide sequence (EMBL accession number, Z 21957) of the cloned chromosomal PER-1 extended-spectrum 13-lactamase gene from a Pseudomonas aeruginosa RNL-1 clinical isolate. bla-PER-1 corresponds to a 924-bp open reading frame which encodes a polypeptide of 308 amino acids. This open reading frame is preceded by a -10 and a -35 region consistent with a putative P. aeruginosa promoter. Primer extension analysis of the PER-1 mRNA start revealed that this promoter was active in P. aeruginosa but not in Escherichia coli, in which PER-1 expression was

driven by vector promoter sequences. N-terminal sequencing identified the PER-1 26-amino-acid leader peptide and enabled us to calculate the molecular mass (30.8 kDa) of the PER-1 mature form. Analysis of the percent GC content of bla-PER-1 and of its 5' upstream sequences, as well as the codon usage for bla-PER-1, indicated that bla-PER-1 may have been inserted into P. aeruginosa genomic DNA from a nonpseudomonad bacterium. The PER-1 gene showed very low homology with other beta-lactamase genes at the DNA level. By using computer methods, assessment of the extent of identity between PER-1 and 10 beta-lactamase amino acid sequences indicated that PER-1 is a class A beta-lactamase. PER-1 shares around 27% amino acid identity with the sequenced extended-spectrum beta-lactamases of the TEM-SHV series and MEN-1 from Enterobacteriaceae species. The use of parsimony methods showed that PER-1 is not more closely related to gram-negative than to gram-positive bacterial class A 13-lactamases. Surprisingly, among class A beta-lactamases, PER-1 was most closely related to the recently reported CFXA from Bacteroides vulgatus, with which it shared 40% amino acid identity. This work indicates that non-Enterobacteriaceae species such as P. aeruginosa may possess class A extended-spectrum 13-lactamase genes possibly resulting from intergeneric DNA transfer.

10/3,AB/5 (Item 5 from file: 55)
DIALOG(R)File 55:BIOSIS PREVIEWS(R)

9568129 BIOSIS Number: 94073129
CLONING OF THE RAT INSULIN-LIKE GROWTH FACTOR BINDING PROTEIN-1 GENE AND ANALYSIS OF ITS 5' PROMOTER REGION
UNTERMAN T G; LACSON R G; MCGARY E; WHALEN C; PURPLE C; GOSWAMI R G
DEP. INTERNAL MED., UNIV. ILL. COLL. MED. AT CHICAGO, VA WEST SIDE MEDICAL CENT., CHICAGO, ILLINOIS.
BIOCHEM BIOPHYS RES COMMUN 185 (3). 1992. 993-999. CODEN: BBRCA
Full Journal Title: Biochemical and Biophysical Research Communications
Language: ENGLISH
To understand specific mechanisms involved in the regulation of insulin-like growth factor binding protein-1 (IGFBP-1), an important modulator of IGF bioactivity, we cloned the rat IGFBP-1 gene and sequenced a 1.5 kb Sph1-Sph1 fragment containing 1110 bases upstream from the translation start site. Computer analysis reveals the presence of ATA, CACCC, and CCAAT elements, and putative homeodomain, AP-1, insulin and glucocorticoid response elements in the 5' promoter. Primer extension and ribonuclease protection studies reveal a single cap site in RNA from rat hepatoma cells and both control and diabetic rat liver.

10/3,AB/6 (Item 6 from file: 55)

DIALOG(R)File 55:BIOSIS PREVIEWS(R)

8185756 BIOSIS Number: 91106756
DOWNSTREAM SEQUENCES MEDIATE INDUCTION OF THE MOUSE CATHEPSIN L PROMOTER BY PHORBOL ESTERS
TROEN B R; CHAUHAN S S; RAY D; GOTTESMAN M M
LAB. CELL BIOL., NIH, BUILDING 37, RM. 2E18, BETHESDA, MD. 20892.
CELL GROWTH DIFFER 2 (1). 1991. 23-32. CODEN: CGDIE
Language: ENGLISH
The major excreted protein (MEP) of mouse fibroblasts is the precursor to a lysosomal acid protease (cathepsin L) whose synthesis is induced by malignant transformation, growth factors, tumors promoters, and cyclic AMP. We have previously cloned a functional gene for MEP from NIH 3T3 cells. When subcloned into chloramphenicol acetyl transferase (CAT) expression vectors, both 4-kilobase and 300 base pair fragments in the 5'-flanking region of the MEP gene confer CAT activity that is stimulated by cyclic AMP treatment but is not stimulated by phorbol ester treatment of NIH 3T3 cells. These fragments confer constitutive promoter activity that is comparable to that of the SV40 promoter. Primer extension, using RNA from cells transiently transfected with MEP-CAT fusion plasmids, demonstrates that phorbol ester treatment increases the amount of transcript from constructs containing both the promoter and sequences downstream of the transcription initiation site, including the first three introns, but not from constructs containing only the 5'-flanking region of the MEP gene. Nuclear run-off experiments confirm that the increase in endogenous MEP mRNA is mediated by increased transcription and not via relief of transcriptional attenuation. Since both the MEP promoter, which contains three potential binding sites for the AP-2 transcription factor, and the SV40 promoter, which contains both AP-1 and AP-2 binding sites, fail to respond to 12-O-tetradecanoylphorbol-13-acetate in NIH 3T3 cells, these upstream motifs are not sufficient to confer phorbol ester responsiveness in NIH 3T3 cells. These results suggest that the MEP gene is regulated in a complex manner by sequences both upstream and downstream of the transcription initiation site.

10/3,AB/7 (Item 7 from file: 55)
DIALOG(R)File 55:BIOSIS PREVIEWS(R)

8151410 BIOSIS Number: 91072410
THE 5' NONCODING REGION SEQUENCE OF THE CHORISTONEURA-BIENNIS ENTOMOPOXVIRUS SPHEROIDIN GENE FUNCTIONS AS AN EFFICIENT LATE PROMOTER IN THE MAMMALIAN VACCINIA EXPRESSION SYSTEM
PEARSON A; RICHARDSON C; YUEN L
VIROLOGY GROUP, GENETIC ENGINEERING SECTION, BIOTECHNOLOGY RESEARCH

INSTITUTE, NATIONAL RESEARCH COUNCIL CANADA, 6100 ROYALMOUNT AVENUE, MONTREAL, QUEBEC, CAN. H4P 2R2.

VIROLOGY 180 (2). 1991. 561-566. CODEN: VIRLA

Full Journal Title: Virology

Language: ENGLISH

About 100 nucleotides of DNA sequence at the 5' noncoding region of the Choristoneura biennis entomopoxvirus spheroidin gene was chemically synthesized and inserted into a vaccinia expression vector, interrupting the vaccinia thymidine kinase gene. When the bacterial .beta.-galactosidase gene was introduced downstream of this sequence and a recombinant vaccinia virus containing these inserts was obtained by homologous recombination, .beta.-galactosidase was shown to be expressed at a high level late in the vaccinia infection cycle. The level of .beta.-galactosidase expression was four- to fivefld higher with this spheroidin-vaccinia recombinant virus than with a similar recombinant in which the .beta.-galactosidase gene was under the control of the vaccinia 7.5-kDa promoter. Primer extension and S1 mapping of the 5' terminus of the .beta.-galactosidase transcript located the transcription initiation site within the spheroidin DNA sequence, confirming the promoter nature of this DNA sequence in the vaccinia system. Dot blot analysis indicated that the difference in .beta.-galactosidase expression with these two recombinant viruses can be attributed to the difference in their transcript levels. We also demonstrated that full promoter activity encoded in the spheroidin 5' noncoding sequence was contained within a 38-nucleotide DNA fragment.

10/3,AB/8 (Item 8 from file: 55)

6624712 BIOSIS Number: 86091263

MULTIPLE REPEATED UNITS IN DROSOPHILA-MELANOGASTER RIBOSOMAL DNA SPACER STIMULATE RIBOSOMAL RNA PRECURSOR TRANSCRIPTION

GRIMALDI G; DI NOCERA P P

EUROPEAN MOL. BIOL. LAB., MEYERHOFSTRASSE 1, D-6900 HEIDELBERG, FEDERAL REPUBLIC OF GERMANY.

PROC NATL ACAD SCI U S A 85 (15). 1988. 5502-5506. CODEN: PNASA

Full Journal Title: Proceedings of the National Academy of Sciences of the United States of America

Language: ENGLISH

Drosophila melanogaster ribosomal DNA (rDNA) transcriptional units are separated by nontranscribed spacer (NTS) segments consisting of tandemly arranged repeats 95, 330, and 240 base pairs long. NTS sequences stimulate transcription from the rRNA precursor (pre-rRNA) promoter. Primer extension analysis of RNA from cells cotransfected with plasmids carrying NTS sequences of various lengths shows that the activity of the pre-rRNA promoter is directly correlated with the number of 240-base-pair repeats;

NTS sequences upstream of these units also stimulate pre-rRNA transcription. The NTS effect might depend upon transcription from duplicated promoters present within the 240- and 330-base-pair repeats. The strength of the pre-RNA promoter correlates in each construct with the level of spacer transcription. The action of spacer sequences, although able to take place over a large distance, is not independent of orientation: stimulation of pre-rRNA transcription is abolished in plasmids carrying inverted NTS segments. Removal of a putative transcription termination site located upstream of the pre-rRNA promoter has no effect on pre-RNA initiation nor does it substantially alter spacer enhancement.

10/3,AB/9 (Item 9 from file: 55)
DIALOG(R)File 55:BIOSIS PREVIEWS(R)

6559815 BIOSIS Number: 86026366
HUMAN AND CHICK ALPHA-2I COLLAGEN MESSENGER RNA COMPARISON OF THE 5' END IN OSTEOBLASTS AND FIBROBLASTS
MARINI J C; GOTTESMAN G S; ZASLOFF M A
HUMAN GENET. BRANCH, BUILD. 10, ROOM 8C429, NATL. INST. CHILD HEALTH HUM. DEV., BETHESDA, MD. 20892.
BIOCHEMISTRY 27 (9). 1988. 3351-3356. CODEN: BICHA
Full Journal Title: Biochemistry
Language: ENGLISH
Type I collagen, a heterotrimer of two .alpha.1(I) chains and one .alpha.2(I) chain, is the major structural protein of bone, skin, and tendon. The collagen of patients with bone diseases has been studied in skin fibroblasts instead of osteoblasts because the genes for type I collagen are single-copy genes. While these studies should detect structural changes in the gene, they might fail to detect defects in processes which are dependent on tissue-specific expression. The studies reported here sought to determine whether the expression of type I collagen in skin and bone was characterized by the use of alternate promotors or alternative splicing in the N-propeptide region. Primer extension and nuclease S1 protection experiments were used to analyze the structure of the .alpha.2(I) mRNA from the 5' end of the gene through the N-telopeptide coding region (exons 1-6) in human and chick osteoblasts and fibroblasts. The protection and primer extension experiment using human and chick mRNA demonstrated identical routes of splicing in skin and bone at the first five splice junctions. These studies provide reassurance that information obtained from the study of type I collagen in fibroblasts may be extrapolated to bone.

10/3,AB/10 (Item 10 from file: 55)
DIALOG(R)File 55:BIOSIS PREVIEWS(R)

4852824 BIOSIS Number: 79095139

TRANSCRIPTION OF HERPES SIMPLEX VIRUS TK SEQUENCES UNDER THE CONTROL OF WILD-TYPE AND MUTANT HUMAN RNA POLYMERASE I PROMOTERS

SMALE S T; TJIAN R

DEP. BIOCHEMISTRY, UNIV. CALIFORNIA, BERKELEY, CALIFORNIA 94720.

MOL CELL BIOL 5 (2). 1985. 352-362. CODEN: MCEBD

Full Journal Title: Molecular and Cellular Biology

Language: ENGLISH

RNA polymerase I transcription was studied in cells transfected with a plasmid, prHuTK, containing the herpes simplex virus tk gene fused to a human rRNA promoter. Primer extension analysis of tk RNA isolated from COS cells transfected with prHuTK reveals that transcription from the RNA polymerase I promoter is highly efficient and initiates at the same position used for the synthesis of endogenous rRNA in HeLa cells. The RNA products derived from prHuTK are distinguishable from normal RNA polymerase II transcripts of tk in that they are not polyadenylated, are extremely unstable, and are found predominantly in the nucleus. The transcription observed is resistant to 300 .mu.g of .alpha.-amanitin per ml. These results strongly suggest that prHuTK transcription is under the control of the human rRNA promoter and RNA polymerase I. To further characterize the activity of the human rDNA promoter in vivo, a series of 5' and 3' deletion mutants was tested in this transfection assay. The deletion analysis indicates that a core region of .apprx. 40 base pairs overlapping the initiation site is critical for transcription. A region between nucleotides -234 and -131 upstream from the core sequence serves to modulate the efficiency of transcription. Insertion into prHuTK of additional ribosomal nontranscribed spacer DNA or the SV40 enhancer element has no apparent effect on the promoter activity. RNA polymerase II transcripts synthesized at low levels from 2 start sites within the core control element of the wild-type RNA polymerase I promoter are activated on deletion of upstream RNA polymerase I promoter sequences. These RNA polymerase II transcripts are not expressed from the endogenous rRNA promoter.

10/3,AB/11 (Item 1 from file: 76)

DIALOG(R)File 76:Life Sciences Collection

01693118 2955898

Nucleotide sequence of the small ribosomal RNA of Encephalitozoon cuniculi

Zhu, Xiaolong; Wittner, M.; Tanowitz, H.B.; Call, A.; Weiss, L.M.

Albert Einstein Coll. Med., 1300 Morris Park Ave., Rm. 504 Forchheimer, Bronx, NY 10461, USA

NUCLEIC ACIDS RES. vol. 21, no. 5, p. 1315 (1993.)

DOCUMENT TYPE: Journal article LANGUAGE: ENGLISH
SUBFILE: Biochemistry Abstracts Part 2: Nucleic Acids; Genetics Abstracts; Microbiology Abstracts Section C: Algology, Mycology and Protozoology

Microsporidia are very primitive eukaryotic obligate intracellular protozoan parasites that have been implicated as important opportunistic pathogens in patients with HIV-1 infection. Very little information is available on the molecular biology of these organisms. The sequence of Vairomorpha necatrix rRNA suggests an early branching of microsporidia from the other eukaryotic organisms. The DNA of the microsporidian, Encephalitozoon cuniculi (Ec), was obtained from rabbit kidney cells (RK-13) infected with the parasite in vitro, then amplified by the polymerase chain reaction using a conserved primer set located at both ends of the small ribosomal RNA gene. The amplified 1.2 Kb fragment from Ec was inserted into SMAI site of pBluescript II (Strategene, La, CA) in the presence of T4 DNA ligase and SmaI restriction enzyme. The resultant positive clones with the correct size were sequenced by double stranded DNA cycle sequencing using Taq polymerase (GIBCO-BRL, Gaithersburg, MD) with the T7 and T3 promoter primers and other internal primers based on the obtained sequence to walk through the whole gene.

10/3,AB/12 (Item 2 from file: 76)
DIALOG(R)File 76:Life Sciences Collection

01226491 1940837
Multiple repeated units in Drosophila melanogaster ribosomal DNA spacer stimulate rRNA precursor transcription.
Grimaldi, G.; Di Nocera, P.P.
European Mol. Biol. Lab., Meyerhofstr. 1, D-6900 Heidelberg, FRG
PROC. NATL. ACAD. SCI. USA. vol. 85, no. 15, pp. 5502-5506 (1988.)
DOCUMENT TYPE: Journal article LANGUAGE: ENGLISH
SUBFILE: Biochemistry Abstracts Part 2: Nucleic Acids; Genetics Abstracts; Entomology Abstracts

Drosophila melanogaster ribosomal DNA (rDNA) transcriptional units are separated by nontranscribed spacer (NTS) segments consisting of tandemly arranged repeats 95, 330, and 240 base pairs long. NTS sequences stimulate transcription from the rRNA precursor (pre-rRNA) promoter. Primer extension analysis of RNA from cells cotransfected with plasmids carrying NTS sequences of various lengths shows that the activity of the pre-rRNA promoter is directly correlated with the number of 240-base-pair repeats NTS sequences upstream of these units also stimulate pre-rRNA transcription.

10/3,AB/13 (Item 1 from file: 342)
DIALOG(R)File 342:Derwent Patents Citation Indx

01632890 WPI Acc No: 95-075254/10
Amplification of target nucleic acid using three primers - including a promoter primer, and enzymes with DNA and RNA polymerase activity, effective at nearly constant temp. with redn. in non-target amplification
Patent Assignee: (GENP-) GEN-PROBE INC
Author (Inventor): RYDER T B; BILLYARD E R; DATTAGUPTA N
Patent (basic):

Patent No	Kind	Date		Examiner Field of Search
WO 9503430	A1	950202	(BASIC)	C12Q

Derwent Week (Basic): 9510
Priority Data: US 97262 (930723)
Applications: AU 9473714 (940720); WO 94US8307 (940720); EP 94305400 (940721)
Designated States
(National): AU; CA; JP; KR
(Regional): AT; BE; CH; DE; DK; ES; FR; GB; IT; LI; LU; NL; SE
Derwent Class: B04; D16
Int Pat Class: C12Q-001/68
Number of Patents: 003
Number of Countries: 019
Number of Cited Patents: 012
Number of Cited Literature References: 020
Number of Citing Patents: 000

10/3,AB/14 (Item 2 from file: 342)
DIALOG(R)File 342:Derwent Patents Citation Indx

01099556 WPI Acc No: 94-065587/08
Auto catalytic amplification of target nucleic acid - using a promoter-primer, or primer, modified so as to block polymerase catalysed extension, also new oligo nucleotide for amplifying Mycobacterium sequences
Patent Assignee: (GENP) GEN-PROBE INC
Author (Inventor): MCDONOUGH S H; KACIAN D L; DATTAGUPTA N; MCALLISTER D L; HAMMOND P W; RYDER T B
Patent (basic)

Patent No	Kind	Date		Examiner Field of Search
WO 9403472	A1	940217	(BASIC)	

Derwent Week (Basic): 9408
Priority Data: 94 WO34720A (000000); US 925405 (920804)
Applications: AU 9347920 (930728); WO 93US7138 (930728); EP 93306169 (930804)

Designated States
(National): AU; CA; JP; KR; NO
(Regional): AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
Derwent Class: B04; D16
Int Pat Class: C07H-021/04; C12P-019/34; C12Q-001/68; C12R-001-32; C12R-001-36
Number of Patents: 003
Number of Countries: 024
Number of Cited Patents: 001
Number of Cited Literature References: 000
Number of Citing Patents: 000

10/3,AB/15 (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00687228
Methods for enhancing nucleic acid amplification.
PATENT ASSIGNEE:
GEN-PROBE INCORPORATED, (690910), 9880 Campus Point Drive, San Diego California 92121-1514, (US), (applicant designated states: AT;BE;CH;DE;DK;ES;FR;GB;IT;LI;LU;NL;SE)
AUTHOR (Inventor):
Ryder, Thomas B., 1863 Angeles Glen, Escondido, California 92029, (US)
Billyard, Elizabeth R., 7512 Aegean Court, San Diego, California 92126, (US)
Dattagupta, Nanibhushan, 4221 Kerwood Court, San Diego, California 92130, (US)
LEGAL REPRESENTATIVE:
Goldin, Douglas Michael (31061), J.A. KEMP & CO. 14, South Square Gray's Inn, London WC1R 5LX, (GB)
PATENT (CC, No, Kind, Date): EP 656425 A1 950607 (Basic)
APPLICATION (CC, No, Date): EP 94305400 940721;
PRIORITY DATA (CC, No, Date): US 97262 930723
LANGUAGE (Publication,Procedural,Application): English; English; English
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; IT; LI; LU; NL; SE
INTL PAT CLASS: C12Q-001/68;
WORD COUNT: 125

ABSTRACT: EP 656425 A1
A method for amplification of a nucleic acid strand in a test sample. The method includes contacting the nucleic acid strand from the test sample simultaneously with at least three oligonucleotide primers. At least one primer is a promoter-primer, and at least one other primer is complementary to the nucleic acid strand, and one other primer is complementary to a

strand complementary to the nucleic acid strand. The method further includes contacting the nucleic acid strand and primers with one or more proteins having RNA-directed and/or DNA-directed DNA polymerase activities, an RNA polymerase activity, and an RNAse H activity under primer-extension conditions to allow amplification of a target region in the nucleic acid strand at essentially constant temperature. (see image in original document)

10/3,AB/16 (Item 2 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00600029
Nucleic acid sequence amplification method.
PATENT ASSIGNEE:
GEN-PROBE INCORPORATED, (690910), 9880 Campus Point Drive, San Diego California 92121-1514, (US), (applicant designated states: AT;BE;CH;DE;DK;ES;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)
AUTHOR (Inventor):
McDonough, Sherrol, 4697 Robbins Street, San Diego, California 92122, (US)
Kacian, Daniel, 3911 Tambor Road, San Diego, California 92124, (US)
Dattagupta, Nanibhushan, 4221 Kerwood Court, San Diego, California 92130, (US)
McAllister, Diane, 8664 Anrol Avenue, San Diego, California 92123, (US)
Hammond, Philip, 3160 East Euclid Boulder, Colorado 80303, (US)
Ryder, Thomas, 1863 Angeles Glen Escondido, California 92029, (US)
LEGAL REPRESENTATIVE:
Sexton, Jane Helen et al (59301), J.A. KEMP & CO. 14 South Square Gray's Inn, London WC1R 5LX, (GB)
PATENT (CC, No, Kind, Date): EP 587298 A2 940316 (Basic)
EP 587298 A3 950830
APPLICATION (CC, No, Date): EP 93306169 930804;
PRIORITY DATA (CC, No, Date): US 925405 920804
LANGUAGE (Publication,Procedural,Application): English; English; English
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
INTL PAT CLASS: C12Q-001/68; C12Q-001/70; C12N-015/10; C12Q-001/68; C12R-001/32; C12Q-001/68; C12R-001/36
WORD COUNT: 100

ABSTRACT: EP 587298 A2
A method, composition and kit for synthesizing multiple copies of a target nucleic acid sequence autocatalytically under conditions of substantially constant temperature, ionic strength, and pH are provided in which multiple RNA copies of the target sequence autocatalytically generate additional

copies using a mixture of blocked and unblocked primers and/or promoter-primers to initiate DNA and RNA synthesis, preferably with reduced non-specific product formation. The invention is useful for generating copies of a nucleic acid target sequence for purposes that include assays to quantitate specific nucleic acid sequences in clinical, environmental, forensic and similar samples, cloning and generating probes.

10/3,AB/17 (Item 3 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00598634
Nucleic acid sequence amplification method, composition and kit.
PATENT ASSIGNEE:
GEN-PROBE INCORPORATED, (690910), 9880 Campus Point Drive, San Diego California 92121-1514, (US), (applicant designated states: AT;BE;CH;DE;DK;ES;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)
AUTHOR (Inventor):
Kacian, Daniel Louis, 3911 Tambor Road, San Diego, California 92124, (US)
McAllister, Diane Lisa, 8664 Anrol Avenue, San Diego, California 92123, (US)
McDonough, Sherrol Hoffa, 4697 Robbins Street, San Diego, California 92122, (US)
Dattagupta, Nanibhushan, 4221 Kerwood Court, San Diego, California 92130, (US)
LEGAL REPRESENTATIVE:
Goldin, Douglas Michael (31062), J.A. KEMP & CO. 14, South Square Gray's Inn, London WC1R 5LX, (GB)
PATENT (CC, No, Kind, Date): EP 587266 A1 940316 (Basic)
APPLICATION (CC, No, Date): EP 93303513 930506;
PRIORITY DATA (CC, No, Date): US 879686 920506
LANGUAGE (Publication,Procedural,Application): English; English; English
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
INTL PAT CLASS: C12Q-001/68;
WORD COUNT: 110

ABSTRACT: EP 587266 A1
A method, composition and kit for amplifying a target nucleic acid sequence under conditions of substantially constant temperature, ionic strength, and pH and using only a single promoter-primer. To effect the amplification, a supply of a single promoter-primer having a promoter and a primer complementary to the 3'-end of the target sequence, and a reverse transcriptase and an RNA polymerase are provided to a mixture including the target sequence; the amplification proceeds accordingly. The invention is useful for generating copies of a nucleic acid target sequence for purposes

that include assays to quantitate specific nucleic acid sequences in clinical, environmental, forensic and similar samples, cloning and generating probes.

10/3,AB/18 (Item 1 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

124263413 CA: 124(20)263413y JOURNAL
Painted Thermoplastic Olefin System: Assessing the Variability of Adhesion Promoter Adhesion Performance following UV Exposure
AUTHOR(S): Nunez, E.; Schmitz, P. J.; Holubka, J. W.
LOCATION: Ford Research Laboratories, SRL, Dearborn, MI, 48121-2053, USA
JOURNAL: Ind. Eng. Chem. Res. DATE: 1996 VOLUME: 35 NUMBER: 5 PAGES: 1760-5 CODEN: IECRED ISSN: 0888-5885 LANGUAGE: English

10/3,AB/19 (Item 2 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

124136818 CA: 124(11)136818j JOURNAL
A primer extension method for quantitation of in vitro synthesized mRNA transcripts directed by promoter elements containing multiple transcription initiation sites
AUTHOR(S): Kosovsky, Marshall J.; Johannes, Gregg
LOCATION: Departments Microbiology Biochemistry, University of Colorado Health Sciences Center, Denver, CO, 80262, USA
JOURNAL: Anal. Biochem. DATE: 1995 VOLUME: 232 NUMBER: 2 PAGES: 258-61 CODEN: ANBCA2 ISSN: 0003-2697 LANGUAGE: English

10/3,AB/20 (Item 3 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

124108943 CA: 124(9)108943c PATENT
Nucleic acid sequence amplification methods that use an RNA intermediate as a template for synthesis of a DNA amplification product
INVENTOR(AUTHOR): Kacian, Daniel L.; Fultz, Timothy J.
LOCATION: USA
ASSIGNEE: Gen-Probe Incorporated
PATENT: United States ; US 5480784 A DATE: 960102
APPLICATION: US 550837 (900710) *US 379501 (890711)
PAGES: 51 pp. Cont.-in-part of U.S. Ser. No. 379,501, abandoned. CODEN: USXXAM LANGUAGE: English CLASS: 435091210; C12P-019/34A

10/3,AB/21 (Item 4 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

123162181 CA: 123(13)162181v JOURNAL
Primer extension analysis of Streptococcus mutans promoter structures
AUTHOR(S): Smorawinska, M.; Kuramitsu, H. K.
LOCATION: Department of Oral Biology, State University of New York, Buffalo, USA
JOURNAL: Oral Microbiol. Immunol. DATE: 1995 VOLUME: 10 NUMBER: 3
PAGES: 188-92 CODEN: OMIMEE ISSN: 0902-0055 LANGUAGE: English

10/3,AB/22 (Item 5 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

123027193 CA: 123(3)27193k PATENT
Enhancement of nucleic acid amplification method employing DNA polymerase and RNA polymerase at constant temperature
INVENTOR(AUTHOR): Ryder, Thomas B.; Billyard, Elizabeth R.; Dattagupta, Nanibhushan
LOCATION: USA
ASSIGNEE: Gen-Probe Incorp.
PATENT: PCT International ; WO 9503430 A1 DATE: 950202
APPLICATION: WO 94US8307 (940720) *US 97262 (930723)
PAGES: 51 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C12Q-001/68A
DESIGNATED COUNTRIES: AU; CA; JP; KR

10/3,AB/23 (Item 6 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

121180538 CA: 121(16)180538e PATENT
Modified chlorinated polyolefins, aqueous dispersions thereof and their use in coating compositions
INVENTOR(AUTHOR): Martz, Jonathan T.; Verardi, Christopher A.; Swarup, Shanti
LOCATION: USA
ASSIGNEE: PPG Industries, Inc.
PATENT: United States ; US 5319032 A DATE: 940607
APPLICATION: US 24561 (930301)
PAGES: 6 pp. CODEN: USXXAM LANGUAGE: English CLASS: 525301000; C08F-008/00A

10/3,AB/24 (Item 7 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

120301238 CA: 120(24)301238x PATENT
Anticorrosive primer composition
INVENTOR(AUTHOR): Hosoda, Yasushi; Shiota, Toshiaki; Suzuki, Nobukazu; Ikeda, Satoshi; Odawa, Taketosi; Kimura, Koichi; Yamamoto, Hisataka
LOCATION: Japan,
ASSIGNEE: Nippon Paint Co., Ltd.; Sumitomo Metal Industries, Ltd.
PATENT: European Pat. Appl. ; EP 573016 A1 DATE: 931208
APPLICATION: EP 93108877 (930602) *JP 92142806 (920603)
PAGES: 13 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C08G-018/64A; C08K-003/36B; C08G-018/58B; C08G-018/80B DESIGNATED COUNTRIES: BE; DE; GB

10/3,AB/25 (Item 8 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

120263055 CA: 120(21)263055a PATENT
Nucleic acid sequence amplification without temperature cycling
INVENTOR(AUTHOR): Mcdonough, Sherrol H.; Kacian, Daniel L.; Dattagupta, Nanibhushan; Mcallister, Diane L.; Hammond, Philip W.; Ryder, Thomas B.
LOCATION: USA
ASSIGNEE: Gen-Probe Incorp.
PATENT: PCT International ; WO 9403472 A1 DATE: 940217
APPLICATION: WO 93US7138 (930728) *US 925405 (920804)
PAGES: 48 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C07H-021/04A; C12P-019/34B; C12Q-001/68B DESIGNATED COUNTRIES: AU; CA; JP; KR; NO

10/3,AB/26 (Item 9 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

120220100 CA: 120(18)220100u JOURNAL
Influence factors on bonding strength of rubber to metal parts
AUTHOR(S): Setiawan, L.; Schoenherr, D.; Weihe, J.
LOCATION: Zentralbereiches Entwickl. Chem., Woco-Untermehmensgruppe, Germany,
JOURNAL: Gummi, Fasern, Kunstst. DATE: 1993 VOLUME: 46 NUMBER: 7
PAGES: 357-63 CODEN: GFKUED ISSN: 0176-1625 LANGUAGE: German

10/3,AB/27 (Item 10 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

120129018 CA: 120(11)129018n PATENT
RNA sequence amplification method, composition, and kit
INVENTOR(AUTHOR): Kacian, Daniel Louis; Mcallister, Diane Lisa; Mcdonough, Sherrol Hoffa; Dattagupta, Nanibhushan
LOCATION: USA
ASSIGNEE: Gen-Probe Inc.
PATENT: PCT International ; WO 9322461 A1 DATE: 931111
APPLICATION: WO 93US4015 (930429) *US 879686 (920506)
PAGES: 50 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C12Q-001/68A; C12P-019/34B; C07H-015/12B DESIGNATED COUNTRIES: AU; CA; FI; JP; KR; NO

10/3,AB/28 (Item 11 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

119196847 CA: 119(19)196847z JOURNAL
pDUAL: A transposon-based cosmid cloning vector for generating nested deletions and DNA sequencing templates in vivo
AUTHOR(S): Wang, Gan; Blakesley, Robert W.; Berg, Douglas E.; Berg, Claire M.
LOCATION: Dep. Mol. Cell Biol., Univ. Connecticut, Storrs, CT, 06269-2131, USA
JOURNAL: Proc. Natl. Acad. Sci. U. S. A. DATE: 1993 VOLUME: 90
NUMBER: 16 PAGES: 7874-8 CODEN: PNASA6 ISSN: 0027-8424 LANGUAGE: English

10/3,AB/29 (Item 12 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

118209722 CA: 118(21)209722m PATENT
Expression constructs for the expression of foreign genes in fish
INVENTOR(AUTHOR): Hew, Choy L.; Fletcher, Garth L.
LOCATION: Can.,
ASSIGNEE: HSC Research and Development L. P.; Seabright Corp. Ltd.
PATENT: PCT International ; WO 9216618 A1 DATE: 921001
APPLICATION: WO 92CA109 (920312) *US 669765 (910315)
PAGES: 70 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C12N-015/00A; C12N-015/85B; C12N-015/18B; A01K-067/027B; C12Q-001/68B; C07K-015/00B
DESIGNATED COUNTRIES: AU; BR; CA; FI; JP; KP; KR; NO; RU; US
DESIGNATED REGIONAL: AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LU; MC; NL;

SE

10/3,AB/30 (Item 13 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

117206336 CA: 117(21)206336g PATENT
Transcription-based nucleic acid amplification system by two-enzyme, self-sustained sequence replication
INVENTOR(AUTHOR): Fahy, Eoin David; Kwoh, Deborah Yantis; Gingeras, Thomas Raymond; Guatelli, John Christopher; Whitfield, Kristina Marie
LOCATION: USA
ASSIGNEE: Siska Diagnostics, Inc.
PATENT: PCT International ; WO 9208800 A1 DATE: 920529
APPLICATION: WO 91US8488 (911113) *US 612688 (901113)
PAGES: 95 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C12P-019/34A; C12Q-001/68B; C07H-015/12B; C07H-017/00B DESIGNATED COUNTRIES: AT; AU; BB; BG; BR; CA; CH; CS; DE; DK; ES; FI; GB; HU; JP; KP; KR; LK; LU; MC; MG; MN; MW; NL; NO; PL; RO; SD; SE; SU DESIGNATED REGIONAL: AT; BE; BF; BJ; CF; CG ; CH; CI; CM; DE; DK; ES; FR; GA; GB; GN; GR; IT; LU; ML; MR; NL; SE; SN; TD; TG

10/3,AB/31 (Item 14 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

115176729 CA: 115(17)176729b PATENT
Nucleic acid sequence autocatalytic amplification methods
INVENTOR(AUTHOR): Kacian, Daniel Louis; Fultz, Timothy J.
LOCATION: USA
ASSIGNEE: Gen-Probe, Inc.
PATENT: European Pat. Appl. ; EP 408295 A2 DATE: 910116
APPLICATION: EP 90307503 (900710) *US 379501 (890711)
PAGES: 74 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C12Q-001/68A
DESIGNATED COUNTRIES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LI; LU; NL; SE

10/3,AB/32 (Item 15 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

113020518 CA: 113(3)20518e PATENT
Methods and kits for amplification and detection of nucleic acid sequences using oligonucleotide promoter-primers

INVENTOR(AUTHOR): Miller, Harvey I.; Johnston, Sean
LOCATION: USA
ASSIGNEE: Genentech, Inc.
PATENT: PCT International ; WO 8906700 A1 DATE: 890727
APPLICATION: WO 89US120 (890112) *US 146462 (880121)
PAGES: 44 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C12Q-001/68A
DESIGNATED COUNTRIES: AU; DK; JP; NO DESIGNATED REGIONAL: AT; BE; CH; DE ; FR; GB; IT; LU; NL; SE

10/3,AB/33 (Item 16 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

111155383 CA: 111(18)155383m PATENT
Primer composition and use thereof in bonding nonpolar substrates
INVENTOR(AUTHOR): McDonnell, Patrick F.
LOCATION: Ire.,
ASSIGNEE: Loctite (Ireland) Ltd.
PATENT: European Pat. Appl. ; EP 295013 A2 DATE: 881214
APPLICATION: EP 88305082 (880603) *IE 1493 (870605)
PAGES: 6 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C09J-005/02A; C08J-005/12B; C09J-003/14B DESIGNATED COUNTRIES: DE; FR; GB; IT; SE

10/3,AB/34 (Item 17 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

97157291 CA: 97(19)157291w JOURNAL
The RNA primer promoter, as defined in vitro, is essential for pMB1 plasmid replication in vivo
AUTHOR(S): Cesareni, Gianni
LOCATION: Eur. Mol. Biol. Lab., Heidelberg, Fed. Rep. Ger.
JOURNAL: J. Mol. Biol. DATE: 1982 VOLUME: 160 NUMBER: 1 PAGES: 123-6
CODEN: JMOBAK ISSN: 0022-2836 LANGUAGE: English

?S PRIMER? (2N) (MODIFIED OR UNMODIFIED OR NONMODIFIED)

```
         83205  PRIMER?
        331897  MODIFIED
         12557  UNMODIFIED
           296  NONMODIFIED
    S11    485  PRIMER? (2N) (MODIFIED OR UNMODIFIED OR NONMODIFIED)
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?S RNASE OR RNAASE

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         30403  RNASE
          1743  RNAASE
```

S12 31886 RNASE OR RNAASE
?S S11 AND S12

485 S11
31886 S12
S13 6 S11 AND S12
?T S13/3,AB/1-6

>>>No matching display code(s) found in file(s): 342, 399

13/3,AB/1 (Item 1 from file: 55)
DIALOG(R)File 55:BIOSIS PREVIEWS(R)

10058081 BIOSIS Number: 95058081
APPLICATION OF THE POLYMERASE CHAIN REACTION TO THE RIBONUCLEASE PROTECTION ASSAY
YANG H; MELERA P W
DEP. BIOLOGICAL CHEM., GRAD. PROG. MOL. CELL BIOL., UNIV. MD. SCH. MED., BALTIMORE, MD. 21201, USA.
BIOTECHNIQUES 13 (6). 1992. 922-927. CODEN: BTNQD
Full Journal Title: Biotechniques
Language: ENGLISH
We have developed a modified RNase protection assay in which the antisense RNA probe is prepared from a PCR-amplified DNA template rather than from a linearized plasmid DNA template. In this assay, an RNA polymerase promoter sequence is attached to the 5' end of the antisense PCR primer. Using this modified antisense primer in conjunction with the paired sense primer, PCR amplification generates a linear DNA template that includes an RNA polymerase promoter sequence. Transcription in vitro initiated by the incorporated promoter in the presence of RNA polymerase and ribonucleotide triphosphates produces a radiolabeled run-off antisense RNA transcript, which can then be used as probe for RNase protection analysis. Probes generated by this method obviate the need to subclone DNA sequences into transcription vectors for synthesis of antisense transcripts. Due to the simpilicity of its design and the lack of need for subcloning, this strategy offers greater flexibility than conventional methods for the production of single-stranded RNA probes, and thus facilitates the implementation of the ribonuclease protection assay.

13/3,AB/2 (Item 2 from file: 55)
DIALOG(R)File 55:BIOSIS PREVIEWS(R)

7126593 BIOSIS Number: 88049338
A MODIFIED PRIMER EXTENSION PROCEDURE FOR SPECIFIC DETECTION OF DNA RNA

HYBRIDS ON NYLON MEMBRANES

KAINZ P; SEIFRIEDSBERGER M; STRACK H-B

DEP. OF BIOCHEM., INST. OF GEN. BIOL., BIOCHEM. AND BIOPHYSICS, UNIV. OF SALZBURG, A-5020 SALZBURG, AUSTRIA.

ANAL BIOCHEM 179 (2). 1989. 366-370. CODEN: ANBCA

Full Journal Title: Analytical Biochemistry

Language: ENGLISH

We have developed a modified primer extension procedure for specific detection of mRNA. Alkali-fragmented total cellular RNA or some RNA fraction is hybridized to single-stranded or double-stranded M13 DNA containing the insert of interest which is immobilized on nylon membranes. Hybridized RNA is then detected by incubation of membranes with Escherichia coli RNase H and DNA polymerase I. RNase H is used for nicking the RNA in the hybrids. The resulting 3'-OH groups can subsequently be used by DNA polymerase I to synthesize a labeled complementary strand. The method described is both relatively fast and sensitive and particularly useful for screening large numbers of DNA clones for their representation in RNA populations. Using total cellular RNA as hybridization probe and single-stranded M13 DNA as template as low as 0.25 ng of a specific mRNA was detected (2.5-fold background) when adding 1 .mu.Ci[3H]dCTP or 2.5 .mu.Ci[32P]d-CTP alternatively as radioactive precursor for the labeling reaction. The detection limit increased to 1 ng (2-fold background) with denatured replicative form double-stranded M13 DNA as template.

13/3,AB/3 (Item 1 from file: 72)

DIALOG(R)File 72:EMBASE

7431529 EMBASE No: 89153892

A modified primer extension procedure for specific detection of DNA-RNA hybrids on nylon membranes

Kainz P.; Seifriedsberger M.; Strack H.-B.

Department of Biochemistry, Institute of General Biology, Biochemistry and Biophysics, University of Salzburg, A-5020 Salzburg Austria

ANAL. BIOCHEM. (USA) , 1989, 179/2 (366-370) CODEN: ANBCA ISSN: 0003-2697

LANGUAGES: English

We have developed a modified primer extension procedure for specific detection of mRNA. Alkali-fragmented total cellular RNA or some RNA fraction is hybridized to single-stranded or double-stranded M13 DNA containing the insert of interest which is immobilized on nylon membranes. Hybridized RNA is then detected by incubation of membranes with Escherichia coli RNase H and DNA polymerase I. RNase H is used for nicking the RNA in the hybrids. The resulting 3'-OH groups can subsequently be used by DNA polymerase I to synthesize a labeled complementary strand. The method described is both relatively fast and sensitive and particularly useful for

screening large numbers of DNA clones for their representation in RNA populations. Using ' total cellular RNA as hybridization probe and single-stranded M13 DNA as template as low as 0.25 ng of a specific mRNA was detected (2.5-fold background) when adding 1 microCi (3H)dCTP or 2.5 microCi (32P)d-CTP alternatively as radioactive precursor for the labeling reaction. The detection limit increased to 1 ng (2-fold background) with denatured replicative form double-stranded M13 DNA as template.

13/3,AB/4 (Item 1 from file: 76)
DIALOG(R)File 76:Life Sciences Collection

01264665 2028888
A modified primer extension procedure for specific detection of DNA-RNA hybrids on nylon membranes.
Kainz, P.; Seifriedsberger, M.; Strack, H. B.
Dep. Biochem., Inst. Gen. Biol., Biochem. and Biophys., Univ. Salzburg, A-5020 Salzburg, Austria
ANAL. BIOCHEM. vol. 179, no. 2, pp. 366-370 (1989.)
DOCUMENT TYPE: Journal article LANGUAGE: ENGLISH
SUBFILE: Biochemistry Abstracts Part 2: Nucleic Acids; Biotechnology Abstracts

The authors have developed a modified primer extension procedure for specific detection of mRNA. Alkali-fragmented total cellular RNA or some RNA fraction is hybridized to single-stranded or double-stranded M13 DNA containing the insert of interest which is immobilized on nylon membranes. Hybridized RNA is then detected by incubation of membranes with Escherichia coli RNase H and DNA polymerase I. RNase H is used for nicking the RNA in the hybrids. The resulting 3'-OH groups can subsequently be used by DNA polymerase I to synthesize a labeled complementary strand. The method described is both relatively fast and sensitive and particularly useful for screening large numbers of DNA clones for their representation in RNA populations.

13/3,AB/5 (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

08409653 93119653
Application of the polymerase chain reaction to the ribonuclease protection assay.
Yang H; Melera PW
Department of Biological Chemistry, University of Maryland School of Medicine, Baltimore 21201.

iotechniques (UNITED STATES) Dec 1992, 13 (6) p922-7, ISSN 0736-6205
ournal Code: AN3
Contract/Grant No.: CA-49538, CA, NCI
Languages: ENGLISH
Document type: JOURNAL ARTICLE
We have developed a modified RNase protection assay in which the ntisense RNA probe is prepared from a PCR-amplified DNA template rather han from a linearized plasmid DNA template. In this assay, an RNA olymerase promoter sequence is attached to the 5' end of the antisense PCR rimer. Using this modified antisense primer in conjunction with the paired ense primer, PCR amplification generates a linear DNA template that ncludes an RNA polymerase promoter sequence. Transcription in vitro nitiated by the incorporated promoter in the presence of RNA polymerase nd ribonucleotide triphosphates produces a radiolabeled run-off antisense NA transcript, which can then be used as probe for RNase protection nalysis. Probes generated by this method obviate the need to subclone DNA equences into transcription vectors for synthesis of antisense ranscripts. Due to the simplicity of its design and the lack of need for ubcloning, this strategy offers greater flexibility than conventional ethods for the production of single-stranded RNA probes, and thus acilitates the implementation of the ribonuclease protection assay.

13/3,AB/6 (Item 2 from file: 155)
IALOG(R)File 155:MEDLINE(R)

7070173 89372173
A modified primer extension procedure for specific detection of DNA-RNA ybrids on nylon membranes.
Kainz P; Seifriedsberger M; Strack HB
Department of Biochemistry, University of Salzburg, Austria.
Anal Biochem (UNITED STATES) Jun 1989, 179 (2) p366-70, ISSN 003-2697 Journal Code: 4NK
Languages: ENGLISH
Document type: JOURNAL ARTICLE
We have developed a modified primer extension procedure for specific letection of mRNA. Alkali-fragmented total cellular RNA or some RNA raction is hybridized to single-stranded or double-stranded M13 DNA ontaining the insert of interest which is immobilized on nylon membranes. ybridized RNA is then detected by incubation of membranes with Escherichia oli RNase H and DNA polymerase I. RNase H is used for nicking the RNA in he hybrids. The resulting 3'-OH groups can subsequently be used by DNA olymerase I to synthesize a labeled complementary strand. The method escribed is both relatively fast and sensitive and particularly useful for screening large numbers of DNA clones for their representation in RNA populations. Using total cellular RNA as hybridization probe and

gle-stranded M13 DNA as template as low as 0.25 ng of a specific mRNA as detected (2.5-fold background) when adding 1 microCi [3H]dCTP or 2.5 microCi [32P]d-CTP alternatively as radioactive precursor for the labeling reaction. The detection limit increased to 1 ng (2-fold background) with denatured replicat[illegible] doub[illegible]nded M13 DNA as template.
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